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House or Home? Constituent preferences over legislator effort allocation

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Abstract

In many political systems legislators face a fundamental trade-off between allocating effort to constituency service and to national policy-making activities, respectively. How do voters want their elected representatives to solve this trade-off? We provide new insights into this question by developing a conjoint analysis approach to estimating voters' preferences over their legislator's effort allocation. We apply our approach in Britain and find that effort allocation has a significant effect on voter evaluations of legislators, even in a political system where other legislator attributes – in particular party affiliation – might be expected to predominate. This effect is non-linear, with voters generally preferring a moderate balance of constituency and national policy work. Preferences over legislator effort allocation are not well-explained by self-interest or more broadly by instrumental considerations. They are, however, associated with voters' local-cosmopolitan orientation, suggesting that heuristic reasoning based on underlying social dispositions may be more important in determining preferences over representative activities.

Keywords

Conjoint analysis; constituency service; effort allocation; home styles; instrumental reasoning

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A fundamental decision that legislators in many political systems must make is how to allocate their limited resources between national policy work and constituency service. In his landmark study of US legislator ‘home styles’ Fenno (1978: 33) observed an ‘omnipresent and severe’ tension between these two broad types of activity, the first centered around the national legislature and involving committee membership, plenary debates and casting votes on legislation, the second centered on the legislator’s district, helping individual constituents with problems (‘case work’) or promoting the interests of larger groups of constituents (‘project work’). Since Fenno’s study, political scientists have developed a good understanding of how parliamentary representatives in various democracies divide their attention and effort between national policy work and constituency service (e.g. André et al. 2015; Brouard et al. 2013; Butler et al. 2012; Cain et al. 1987; Heitshusen et al. 2005; Norton & Wood 1993).

Yet we know much less about how voters view the trade-off between their representative’s national policy work and constituency service. Existing survey research shows how voters rank legislators’ constituency and national policy-oriented activities in terms of importance (e.g. Cain et al. 1987: chapter 1; Cowley 2013; Grant & Rudolph 2004; Griffin & Flavin 2011; Méndez-Lago & Martínez 2002), but does not tell us about the *balance* of constituency service and national policy work that voters want. Moreover, it remains unclear whether voters really care about representatives’ effort allocation when compared to other legislator attributes – for example, party affiliation – or whether voters care about effort allocation only inasmuch as it serves as a proxy for other legislator attributes.

Advancing our understanding of these voter preferences is important because it allows us to better evaluate whether legislators’ effort allocation decisions correspond to the wishes of their constituents (Grant & Rudolph 2004; Griffin & Flavin 2011). A lack of such correspondence could lead to voter dissatisfaction not just with individual representatives, but also with the political system more broadly (Bowler & Karp 2004).

In this paper, we contribute by developing and implementing a new approach to the estimation of popular preferences over the trade-off between constituency service and national policy work. We present the results of two conjoint analysis survey experiments (Green et al. 2001; Hainmueller et al. 2014) in which representative samples of British voters were asked to choose between pairs of hypothetical local Members of Parliament (MPs) who varied on several attributes, including their allocation of effort to constituency service and national policy work. Our empirical strategy has important advantages. Compared to an observational study of MP constituency effort and subsequent electoral performance, an experimental approach dramatically reduces concerns about endogeneity and measurement error. Compared to existing survey-based approaches, a conjoint analysis approach yields valuable additional information regarding: the mix of constituency and national policy work that constituents prefer (not just their rank ordering of different activities); the extent to which constituents care about this trade-off when it is just one of various politically salient MP attributes; and whether preferences over constituency service versus national policy are conditional on other MP attributes.

We find that British voters do care about how their legislative representatives allocate effort between national policy work and constituency service. Even though our hypothetical MPs varied on several other potentially important attributes, voters' choices between MPs were significantly influenced by the time those MPs allocated to constituency and national policy work, respectively. Crucially, even in a party-dominated system such as Britain, partisan considerations did not overwhelm concerns about individual MP effort allocation, suggesting that this attribute is also likely to matter for voter evaluations in less party-dominated systems such as the United States. Moreover, our conjoint analysis results suggest that the importance voters attach to effort allocation does not result simply from the possibility that voters use a high level of constituency effort as a proxy for faithful representation of constituency policy preferences or independence from partisan politics.

Interestingly, we find that the effect of increasing constituency attentiveness is non-linear. Voters have a clear aversion to MPs who spend the minimum possible amount of time on constituency service, but prefer MPs who strike a moderate balance between constituency service and national policy work to MPs who spend the maximum possible amount of time on constituency service. This finding is difficult to reconcile with the notion that preferences over legislator home-styles result from instrumental reasoning. Instead, we present initial evidence that demand for constituency service is associated with heuristic reasoning based on local-cosmopolitan orientation – i.e. the extent to which they care about their local community or about broader groups such as the nation as a whole (Bechtel et al. 2014; Dye 1963).

EXPECTATIONS

Should we expect voters to care about how their legislator allocates attention between constituency service and national policy work? Given that this decision fundamentally shapes a legislator's representational style (Fenno, 1978), it would make sense for voters to be concerned about it. Evidence from the UK and US suggests that legislators believe that their constituents care about how much effort they allocate to constituency service and that this allocative decision is consequential for their re-election prospects (Cain et al. 1987: 80-84), a belief likely to be rooted in legislators' own interactions with their constituents. This is also consistent with existing survey evidence that, when offered a list of activities undertaken by legislators, voters often rank constituency-oriented activities as important (Cain et al. 1987, ch. 1; Cowley 2013; Grant and Rudolph 2004; Griffin & Flavin 2011; Méndez-Lago & Martínez 2002).

However, the political world involves multidimensional judgments and choices, and voters may not place much weight on how their legislator divides his or her time when they simultaneously consider other attributes of that MP. In particular, voters may focus more on MP party affiliation rather than MP effort allocation. In a party-centric Westminster system

such as the British one, many voters may only care about whether their MP occupies a seat in parliament for their preferred national party and therefore increases the chances of that party influencing policy or forming a government. Moreover, voters may sensibly use party affiliation as an information short-cut rather than having to collect and process other information about MPs (Ferejohn 1990). Beyond party affiliation, voters may also distinguish between representatives based on their dissent from their party line on policy (Carson et al. 2010; Kam 2009), their role interpretation as a trustee or delegate (Barker & Carman 2012; Bengtsson and Wass 2010; Carman 2006, 2007; Doherty 2013), their legislative experience (Jacobson 1989), and their gender (Sanbonmatsu 2002). Given that such other attributes are important to voters, they may not care about effort allocation when they also have information about these other characteristics of legislators.

A further issue is whether voters care about MP effort allocation itself or just perceive this as a signal – or ‘alias’ (Hainmueller et al. 2014) – of some other attribute. One potentially ‘aliased’ attribute is an MP’s trustee/delegate style of representation: voters may assume that an MP who devotes more time to constituency service will also more ardently represent constituents’ views in national policy debates. Another potentially ‘aliased’ attribute is MP independence from party: voters may assume that MPs who focus attention on Westminster are also party loyalists. Trustees and rebels are generally preferred by voters (e.g. Carson et al. 2010; Carman 2006), so we must distinguish preferences over MP constituency effort allocation from preferences over these other attributes.

The key question is therefore whether voters care about MP effort allocation when asked to consider other MP characteristics that are more relevant to citizens and/or aliased by effort allocation. As we detail below, our conjoint analysis approach allows us to answer this question in a way that observational and existing survey-based studies cannot. First, however, we consider alternative potential explanations for preferences over MP effort allocation, based

on different styles of voter reasoning: self-interested and instrumental reasoning on the one hand, and heuristic reasoning based on social dispositions on the other.

Self-interested and instrumental reasoning

Existing explanations for voter preferences over legislator effort allocation have tended to focus on self-interested and instrumental reasoning on the part of voters (Griffin and Flavin, 2011; Harden, 2011). According to this type of explanation, voters ask themselves how the work of a representative could produce personal benefits for themselves (Harden 2011; Sears & Funk 1991). These personal benefits may be tangible and direct: for example, a representative can help constituents in their dealings with other branches of government ('service responsiveness') (Eulau & Karps 1977). They can also accrue if a representative supports the local constituency as a whole, for example if they address the needs and problems of local groups ('project work') (Norton & Wood 1993) or secure funds and goods for the constituency ('allocation responsiveness') (Eulau & Karps 1977). Finally, personal benefits may of course also result from the national policy work of a representative, who can help to develop laws or amendments that further the well-being of the constituent. For example, a representative could be influential in ensuring that regulation is advantageous to a citizen's business. The self-interest of citizens can therefore conceivably be furthered by both local constituency and national policy work.

Which type of work self-interested citizens prefer should depend on how their representative can achieve a greater impact, which is in turn largely determined by the institutional setting within which representatives are situated. Therefore, the more a political system limits an individual representative's impact on national policy, the more instrumentally motivated constituents should prioritize their representative's constituency

work over his or her national policy work.¹ Given that British MPs have a comparatively low level of influence on national policy outcomes (Cain et al. 1987; Lijphart 2012) but can be reasonably effective at carrying out constituency service (Cain et al. 1987: 60; Norton & Wood 1993)², the self-interest account would predict that, *on average, British citizens should strongly prioritize constituency work over national policy work*. The self-interest account also predicts how preferences should vary between citizens within the same political system. In particular, *citizens should have a greater preference for effort allocated to constituency work the more they themselves stand to benefit from this* (Griffin & Flavin 2011; Harden 2011).

A related explanation for preferences over legislator effort allocation is that citizens are instrumental but driven by sociotropic concerns as well as self-interest (Kinder & Kiewiet 1979; Funk 2000; Sears & Funk 1991). Here, citizens are not exclusively concerned with their expected personal gains from the work of a representative, but also attach some weight to the total expected benefit to society – i.e. how many people in society are likely to benefit from the work of the representative and by how much (Edlin et al. 2007). Interestingly, if voters are sociotropic rather than purely self-interested, national policy work should retain some value even if there is only a low probability that an individual MP will influence national outcomes: any improvement in national public policy will impact millions of people across the entire country (Edlin et al. 2007), which raises the expected gains from national policy work relative

¹ We expect the same result if one increases the impact of constituency work on local outcomes.

² This is partly because UK constituencies are of a manageable size, averaging 68,000 voters (See <http://www.parliament.uk/about/how/elections-and-voting/constituencies/>, accessed 14 May 2013).

to those from constituency work.³ However, we do not know the weight that voters attach to societal benefit relative to individual benefit, so the sociotropic account does not generate clear predictions regarding average preferences over MP effort allocation across British voters.

Nevertheless, because both the sociotropic and the self-interest accounts share the assumption that voters are instrumental and goal-oriented, we can conduct a joint test for both explanations based on variation in preferences across voters. If voters reason instrumentally, their preferences over the trade-off between MP constituency work and national policy work should depend on the expected impact of each activity. Specifically, we should observe that *voters prefer more MP effort to be devoted to constituency service the more impact they perceive MPs to have on constituency outcomes compared to national policy outcomes.*⁴

³ Of course, there is a degree of societal gain from constituency service activities (e.g., saving a hospital or factory from closure benefits a number of people), but compared to national policy changes these activities can only benefit a limited number of people in the immediate locality.

⁴ This prediction holds if one extends the sociotropic voting account to allow voters to attach extra weight to the welfare of certain societal groups (e.g. social classes, ethnic groups, or geographic groups) (Mutz & Mondak 1997). To see this, take an extreme case, where the voter attaches weight exclusively to the welfare of a certain social group, and therefore evaluates MP effort allocation solely in terms of outcomes for this group. As long as this group can potentially benefit from both constituency work and national policy work on the part of the voter's own MP, then the voter's preferences over MP effort allocation should be sensitive to the perceived relative effectiveness of the two types of MP activity. If the social group in question has members in the voter's own constituency and in other constituencies (as would likely be the case with a particular social class), then the group as a whole may benefit

Heuristic reasoning based on social dispositions

An alternative explanation holds that constituent preferences over MP activities are not driven by instrumental reasoning but by the use of basic underlying dispositions or orientations as heuristics.⁵ In this paper, we test one disposition that voters would plausibly use as a heuristic to evaluate how MPs should divide attention between constituency and national policy work: the degree to which voters themselves have a local or national/cosmopolitan outlook (Dye 1963; Jennings 1967; Merton 1957). This ‘local-cosmopolitanism’ captures the extent to which individuals care about and pay attention to developments in their local area over and above national and international developments (Jennings 1967: 293).⁶ It reflects an individual’s degree of attachment, sense of belonging and general affect towards his or her local area (Roudometof 2005; Olofsson & Öhman 2007) and is related to voting behaviour in US presidential elections (Jackman & Vavreck 2011) as well as attitudes towards Eurozone

from national policy changes effected by the voter’s MP, while at least a subset of the group may benefit from the MP’s constituency work. Even if the social group in question has members exclusively in the voter’s own constituency (e.g., if the group *is* the voter’s own local community), this group obviously benefits from their MP’s constituency work, but can still benefit from national policy work for the same reasons that an individual constituent can potentially benefit from their MP’s national policy work (see above).

⁵ In terms of dual-process models (Chaiken & Trope 1999), instrumental reasoning stems from careful System 2 thinking, whereas heuristic reasoning is more intuitive and thus related to System 1.

⁶ While in the literature the disposition ranges from a local via a national to a global cosmopolitan outlook, we focus in this paper on the contrast between local and national orientations.

bailouts (Bechtel et al. 2014). Potential antecedents of local-cosmopolitan disposition include factors such as personality traits, education and social class (Jennings 1967, Jackman & Vavreck 2011).⁷

If constituents use this disposition as a heuristic when considering MP effort allocation, they simply evaluate whether the *focus* of the MP's activity reflects their own local-cosmopolitan orientation, rather than evaluating the *expected outcome* of the MP's activity. Thus, citizens with a more local orientation would prefer constituency work because they see their local area as the more relevant level of the polity, while voters with a more cosmopolitan orientation would want their representative to focus on parliamentary activities because they primarily think of politics in terms of national or international issues. Contrast this with the instrumental reasoning hypothesis, which posits that even if a voter has a cosmopolitan outlook (and therefore ultimately cares more about national politics), this voter will nevertheless prefer their representative to focus on constituency work if this is where they think the MP can have the greatest impact.

Based on this logic we can formulate the individual-level hypothesis that if voters use their local-cosmopolitan orientation as a heuristic when reasoning about legislator effort allocation then *voters with a less local orientation will have a greater preference for national policy work*. Moreover, if voters make use of this heuristic rather than reasoning instrumentally, then preferences over effort allocation should be unrelated to the perceived impact of legislators on constituency versus national policy outcomes.

At the national level, this would suggest that the average voter preference concerning representative effort allocation should at least partly result from how locally or nationally

⁷ This also means it is possible that voter characteristics such as economic disadvantage may *indirectly* affect preferences over MP effort allocation by shaping local-cosmopolitan orientation.

oriented voters are on average. It is likely that British voters are rather nationally oriented compared to voters elsewhere. In Britain, national politics generally dominates regional and local politics: units of local or regional government have little significant political power (Marks et al. 2008), and the newspaper market is characterized by influential national newspapers (Bens & Ostbye 1998). To the extent that these factors shape local-cosmopolitan orientations in a population, we would therefore expect that British voters on average *prefer at least a moderate amount of national policy work from their legislator*.

METHOD

We estimate voters' preferences over the effort allocated by representatives to constituency and national policy work using choice-based conjoint analysis survey experiments (Green et al. 2001; Hainmueller et al. 2014). Such experiments typically involve participants making choices between two or more alternatives that vary along several dimensions and have recently been employed by political scientists to evaluate voter preferences over candidate attributes (Franchino and Zucchini 2015; Hainmueller et al. 2014). In our experiment, we ask respondents to choose between two MPs characterized by several varying attributes.

The conjoint analysis approach combines the advantages of existing survey-based strategies for eliciting voter preferences over representative characteristics and behavior. Traditional split sample survey experiments – where respondents evaluate legislators who vary along one or two dimensions (e.g. Huddy & Terkildsen 1993; Sanbonmatsu 2002; Campbell & Cowley 2014) – provide detailed information concerning voters' preferences over a particular legislator attribute of interest, as do non-experimental studies which ask respondents more directly how they think a representative should act on a specific behavioural dimension (e.g. Carman 2006). Meanwhile, studies which ask survey respondents to rank various legislator activities (e.g. Cain et al. 1987) yield information about the relative importance voters attach to these different activities. By presenting voters with

multidimensional choices, a conjoint analysis approach yields both types of information simultaneously. This enables us to test explanations for voter preferences over the MP effort allocation trade-off at the same time as examining whether voters in fact care about this trade-off. It also enables us to test whether voters simply view MP effort allocation as a proxy for other MP attributes by testing whether effort allocation has an impact in the presence of explicit information about these other attributes.

Another alternative empirical strategy used in the literature relies on behavioral rather than survey data, examining how legislators' effort allocation affects their subsequent electoral performance (Cain et al. 1987; Gaines 1998; Norton & Wood 1993). Of course, such an observational strategy overcomes the external validity issues associated with any survey experiment. However, drawing clear inferences from observational studies is problematic if representative behavior is endogenously influenced by constituent expectations or by local electoral vulnerability (Cain et al. 1987: 128; King 1991). Furthermore, observational studies may understate how much constituents care about representative effort allocation if constituents do not receive clear information about effort allocation decisions or if their perceptions are subject to partisan biases. In contrast, in our survey experiments the variation in representative behavior is clearly measured and exogenous by design, and all subjects receive unambiguous information concerning this behavior. Furthermore, as Hainmueller et al. (2014: 27) point out, a conjoint analysis design arguably improves external validity relative to other types of survey experiments: presenting respondents with rounded, multidimensional legislator profiles not only encourages more realistic respondent choices, but also gives fewer incentives for respondents to offer socially desirable answers (since there are multiple justifications for any given choice).

Experimental design

We ran two conjoint analysis survey experiments. The first was fielded between 5 and 6

December 2012 to 1,899 respondents. The second was fielded between 24 and 25 September 2013 to 1,919 respondents. For each survey, YouGov drew a sample from its online panel, designed to be representative of British adults.⁸

After a short introduction, we asked respondents to consider pairs of hypothetical MPs characterized by five attributes, each of which had between 2 and 4 levels. Our focus in this paper is on the effort allocated to constituency service and national policy work. As a

⁸ YouGov maintain an online panel of over 360,000 British adults (recruited via their own website, advertising, and partnerships with other websites), with data on the socio-demographic characteristics and newspaper readership of each panel member. Drawing on this information, YouGov uses targeted quota sampling to select a sub-sample of panelists for participation in each survey, with quotas based on the distribution of age, gender, social class and type of newspaper readership in the British adult population. YouGov has multiple surveys running at any time and uses proprietary software to determine, on a rolling basis, which panelists to email invites to and how to allocate invitees to surveys when they respond. Panelists who are ‘slow’ to respond to invites are thus still able to participate in surveys. Along with the modest cash incentives YouGov offer to survey participants, this helps ensure that survey samples contain panelists who are less politically engaged. A recent British Election Study comparison of YouGov data with a more traditional face-to-face survey showed only small differences in the distribution of most key explanatory variables and in regression models for political choices (Sanders et al. 2007). For further information on YouGov’s sampling procedures see <https://yougov.co.uk/about/panel-methodology/> and http://www.britishelectionstudy.com/custom/uploads/2014/05/BES_Wave1_tech.pdf. All analyses reported here use un-weighted data. Appendix 8 in the supplemental information illustrates how our main results are unchanged when we weight the data according to standard YouGov weights (constructed using the same targets used for the sampling quotas).

behavioral manifestation of effort allocation, we state how the MPs divided their working week between these two activities. Specifically, each MP could spend 1/2/3/4 days ‘working on local constituency issues’ and 4/3/2/1 days ‘reviewing and working on national policies in Parliament’, with each MP being constrained to work for five days in total. We took care to phrase the activities in a neutral and non-technical way: we do not state whether the MP actually has any influence on parliamentary or constituency outcomes, nor the extent to which the MP has important posts within the parliament. Overall, this formulation makes the trade-off between the two types of activity explicit while avoiding presenting either in an obviously positive light. It also, captures how constituency work is usually thought about in Britain, namely as case and project work for local voters. Other aspects of constituency service, such as the ability to deliver pork and shape national legislation in locally beneficial ways, are less relevant in the UK than in, for instance, the United States (Cain et al. 1987: 39).

A key decision in designing conjoint analyses concerns which additional attributes to include in the vignettes. First, we included the two MP attributes we identified as being potentially ‘aliased’ by MP effort allocation (Hainmueller et al. 2014). Thus, in Study 2 we included a trustee-delegate attribute, explicitly stating whether each MP pays more attention to his or her own personal views or to those of his or her constituents when thinking about national policy. To capture MP independence from party, in both studies we also varied the dissent behavior of MPs. In Study 1, we varied the frequency with which the MP speaks out or votes against his/her party leadership. In Study 2, we varied how MPs act when they disagree with the party leadership: they could either speak out internally only, or speak out internally and externally, or fail to speak out at all.

Second, we included other MP attributes that capture key factors thought to influence evaluations of representatives. Crucially, we varied the party affiliation of the MP between

Labour and Conservative.⁹ In addition, we varied whether the MP was male or female, and (in Study 1) whether the MP had been in parliament for 3, 10 or 21 years (roughly corresponding to the elections in 2010, 2000 and 1992).¹⁰

MP attribute values were assigned randomly and independently. For our outcome variable we asked respondents: *Based on this information, which ONE of these two MPs would you prefer to have as your MP in the House of Commons?*¹¹ Respondents were presented with a total of five choice tasks.

Figure 1 shows a screenshot of the pre-experiment introductory text as well as a randomly generated example choice task from Study 1. Descriptions were presented in paragraph format to make them more readable; in cognitive pre-testing, a tabular format proved more burdensome for respondents. While attribute ordering is not randomized, we varied the placement of the days spent on constituency versus parliamentary work: in Study 1 they were the first two bullet points, and in Study 2 the final two bullet points.

Modeling the data

Each study yields ten observations per respondent, one for each hypothetical MP with which they are presented across their five choice tasks (e.g. we have $1,899 \times 2 \times 5 = 18,990$ observations for Study 1). Our outcome variable measures whether or not the respondent

⁹ We did not include MPs from other political parties for reasons of simplicity.

¹⁰ Appendix 1 contains the full list of MP attributes and their possible values.

¹¹ A response was required; there was no ‘don’t know’ option. In Study 2, we left out the phrase ‘in the House of Commons’ to avoid priming national policy considerations. We also included a second question in Study 1, asking respondents to assess how happy they would be to have each MP represent them in Parliament. Analyses using this question yield substantively similar results.

chose that MP. More formally, if $i = \{1, \dots, 1899\}$, $k = \{1, \dots, 5\}$, $j = \{1, 2\}$ and $l = \{1, \dots, 5\}$ index subjects, choice tasks, choice alternatives (i.e. MPs) and choice attributes, respectively, our binary dependent variable Y_{ijk} is equal to one if subject i in the k th choice task chooses the j th MP, and zero otherwise.

Our causal quantity of interest is the *average marginal component effect* (AMCE) of each level of an MP attribute: that is, the change in the probability that an MP is preferred by the average British voter when the value of the attribute (component) of interest is changed from one level to another, averaging over all possible values of the MP's remaining attributes and all possible values of the attributes of the other MP in the choice task (Hainmueller et al. 2014). Because our design employs completely independent randomization, simple difference-in-means analysis yields unbiased AMCE estimates (Hainmueller et al. 2014: 16). We estimate these differences via OLS with dummy variables for each level of the attribute of interest. Standard errors are clustered by respondent.

RESULTS

Based on our experiments, we first examine the average effect of MP effort allocation on British voters before examining how this effect varies across individuals. In the supporting materials, we also discuss the estimated effects of the other MP attributes included in the experiments and test the validity of the assumptions underlying our AMCE estimates (Appendices 3 and 4).

Average preferences over MP time allocation

Figure 2 presents population AMCE estimates for the number of days per week an MP spends on constituency service as opposed to national policy work. For each level of the attribute, the dot indicates the point estimate for the effect of that level relative to the baseline level where an MP spends 1 day per week on constituency service. The bars represent 95% confidence

intervals.

Figure 2 strongly suggests that British voters do care about how their MP allocates effort between constituency service and national policy work, even when simultaneously confronted with information about other MP attributes, including those potentially aliased by effort allocation. There is a clear aversion among voters toward having an MP who allocates the minimal amount of time to constituency work: compared to an MP who spends only one day per week on constituency issues, MPs who spend two, three or four days per week working on constituency issues are all more likely to be preferred by voters. These estimated effects are all statistically significant and, at between 7 and 13 percentage points, substantial in magnitude too. They also are not an artefact of respondents failing to discriminate between different MP attributes in terms of their importance: while some of the other attributes included in the experiments (e.g. MP independent-mindedness and trustee/delegate style of representation) had stronger effects on respondent choices than did MP time allocation, others (e.g. gender and parliamentary experience) barely influenced respondents' choices at all (see Appendix 3).

The results in Figure 2 average over two types of choice task: same-party comparisons, where both MPs have the same party affiliation, and different-party comparisons, where one MP is Conservative and the other Labour. Unsurprisingly, additional analysis shows that the effects of MP effort allocation are weaker when voters are presented with different- rather than same-party comparisons (see Appendix 5). However, even in different-party comparisons the effects of an MP spending two, three and four days on constituency work are all statistically significant and have point estimates ranging from 5.9 to 8.3 percentage points.¹² Thus, MP's effort allocation matters to voters, even when they

¹² We also checked all two-way interactions between MP time allocation and each other MP attribute. All joint F-tests of all interaction terms were non-significant at the 0.05 level.

simultaneously have to choose between parties.

Figure 2 also tells us about the mix of constituency service and national policy work that British voters prefer their MP to engage in. Our key finding with regard to this is that the effect of MP days spent on constituency service appears to be non-linear. For example, in Study 1, an increase in MP time spent on constituency work from the baseline level of one day per week to two days per week leads to a 10.7 percent increase in the probability that an MP is preferred (95% confidence interval = [8.6, 12.7]). However, an increase from the baseline level to three days only leads to a slightly larger increase of 12.8 [10.7, 14.9] percent. Furthermore, at 7.7 [5.4, 9.9] percent, the effect of an increase in constituency work from the baseline to the maximum of four days per week is actually significantly smaller than that of an increase from the baseline to three days per week.¹³ In other words, voters prefer to have an MP who strikes a *balance* of around three days constituency work to two days national policy work. This pattern is at odds with the notion that citizens' preferences over MP activities are driven mainly by self-interest, for according to that logic British voters should generally prefer MPs to concentrate on constituency work.

To further assess the self-interest explanation for preferences over MP effort allocation, as well as other potential explanations, we now turn to examining how preferences vary across voters.

Likelihood of personally benefitting from constituency work

If citizens are self-interested, then those voters who stand to personally benefit more from

¹³ The pattern for Study 2 is very similar, suggesting that these results are not simply an artifact of timing or design: these studies were fielded a number of months apart and varied in terms attribute ordering and wording.

constituency service should prefer their MP to spend more time on this activity. We test this prediction in two ways.

First, we examine whether constituents who are predisposed to seek assistance from an MP also want their MP to allocate more time to their constituency. We compare respondents based on whether or not they, or someone they know well, had sought personal assistance from their local MP in the last 3 or 4 years. Yet, there are no clearly discernible differences between these groups in the effects of MP constituency work: the maximum difference in AMCE point estimates across the two groups is only 3 per cent (for the AMCE of four MP days on constituency work), the confidence intervals for the estimated effects tend to overlap with each other, and an F-test fails to reject the null hypothesis of no interaction between MP constituency work and voter propensity to seek MP assistance ($p = 0.44$, see Appendix 6 in the supplemental information for full results).

Second, we also examined whether more socio-economically disadvantaged citizens prefer a greater focus on constituency work, as such voters are more likely to benefit from the support and advice of MPs. Yet, when we compare respondents based on their social grade, there is at best a very weak tendency for respondents with lower social grades to prefer greater MP attention to constituency work: the maximum difference in estimated effects comparing respondents in the two most extreme social grade groups (AB versus DE) is only four percent, and an F-test fails to reject the null hypothesis that the effect of MP days on constituency work is the same across voter social grades ($p = 0.58$; see Appendix 6 in the supplemental information for full results).¹⁴ Results are substantively similar when using respondent income as an alternative measure of economic disadvantage.

Of course, these voter characteristics are variables over which we have no

¹⁴ Measures for social grade provided by YouGov and based on the occupation of the household's chief income earner.

experimental control, so we cannot draw strong causal inferences from such analyses. Nevertheless, it does seem that voters who can expect greater personal gain from a constituency-oriented MP do not tend to prefer greater amounts of constituency work. We take this as further evidence that voters' preferences over the MP time allocation trade-off are unlikely to be driven by narrow self-interest.

Perceived impact of MP activities

If voters reason instrumentally – motivated by either self-interest or sociotropic concerns – then those who think MPs have a greater national impact should prefer their MP to focus more on policy work in Parliament, while those who believe MPs have a greater impact at the local level should prioritize constituency work. To test this, in Study 2 we measured respondent perceptions of MPs' relative local and national influence using two agree-disagree statements:

1. *A typical MP makes more of a difference on local issues than on national policy.*
2. *Individual MPs can have an important influence on national policy in Parliament.*

We then group voters according to their levels of agreement with each of these statements and estimated the effect of MP time allocation separately for each group. The results are presented in Figure 3, and suggest no clear relationship between preferences over MP effort allocation and perceptions of the relative impact of MP activities, whether the latter is measured by the first or second statement above. The corresponding F-tests are non-significant in both cases ($p = 0.40$ and $p = 0.54$, respectively), and the maximum difference in point estimates across subgroups is only 4.5 percent (the difference in the effect of three MP days on constituency work comparing respondents who agree and disagree with the first statement above). Thus, there is little indication in our data that instrumental reasoning provides an adequate account

of British voters' preferences over MP effort allocation.¹⁵

Local-cosmopolitan orientation

The heuristic reasoning explanation predicts that voter preferences over MP effort allocation should be related to voters underlying local-cosmopolitan orientation. To measure the latter, we asked respondents in Study 2 to rate their agreement with two statements that assess whether they care more about and pay more attention to local or national politics (see Dye 1963, Jennings 1967, and Bechtel et al. 2014, for a similar approach):

1. *I care more about how things are in my local area than about how things are in the UK as a whole.*
2. *I pay more attention to national UK politics than to politics in my local area.*

Notice that we measure two different aspects of local-cosmopolitan orientation – namely, perceived relevance and attention – and vary the polarity of the agree-disagree statements to mitigate acquiescence bias.

Figure 4 compares the estimated effects of MP effort allocation in our experiment when we subset respondents according to their local-cosmopolitan orientation. For either measure of respondent local-cosmopolitan orientation, there is a clear interaction with MP effort allocation, with significant F-tests in both cases (p-value < 0.01 and p-value = 0.03 for statements 3 and 4, respectively).

¹⁵ If voters are instrumental and self-interested, it may be that perceptions of the relative efficacy of MP constituency work and national policy work *condition* the relationship between how much a voter stands to benefit personally from constituency service and how much effort a voter prefers their MP to allocate to constituency service. However, when we use social grade to proxy likely personal benefits from constituency service, we find little evidence of such an interaction. See Appendix 6 of the supplemental information.

Furthermore, the nature of the interaction is as expected under the heuristic reasoning hypothesis. In the first panel of Figure 4, the more a constituent cares about their local area relative to the UK as a whole, the greater the positive effect of an MP spending more days per week on constituency service; those who care most about their local area relative to the UK as a whole actually prefer MPs to allocate the maximum four days per week to constituency service, while those who care least about their local area prefer this type of MP least. In the second panel, as constituents pay more attention to national rather than local politics, the effect of an MP spending more time on constituency service become significantly smaller. These results are consistent with the argument that popular preferences over MP effort allocation are driven less by detailed instrumental calculations, and more by basic orientations toward the object of MP activities.

Of course, voters' local-cosmopolitan orientations do not emerge out of a vacuum. Indeed, consistent with previous research (Jackman & Vavreck 2011) we find that respondents with a higher level of education, social grade and income tend to have a more cosmopolitan orientation. However, we show in the supporting materials that these background characteristics are not directly associated with preferences over MP effort allocation (Appendix 6), and that the interaction between MP effort allocation and respondent local-cosmopolitanism is robust when we control for these background characteristics and their interaction with MP effort allocation (Appendix 7). Thus, there is little evidence to suggest that the observed association between local-cosmopolitan orientation and preferences over MP effort allocation is a spurious one driven by the antecedents of local-cosmopolitanism.

Finally, our local-cosmopolitan items were asked *after* the experiment to avoid priming considerations among respondents. One additional concern could therefore be that post-hoc rationalization may be responsible for the observed interaction. However, the incentive for rationalization should be comparatively low in a conjoint analysis as no single

attribute is highlighted to respondents. Moreover, if respondents were rationalizing post-hoc, we should also have observed an association between perceived MP local-national influence (also measured after the experiment) and effort allocation preferences.

CONCLUSION

The results of our conjoint analysis experiments show that British voters prefer to have a legislative representative who devotes at least a moderate amount of time to national policy work while still paying strong attention to their constituency. Crucially, this preference is manifest in voters' choices between MPs even in the presence of a variety of politically relevant MP attributes that could plausibly overwhelm these concerns (particularly MP party affiliation) or that might otherwise be aliased by MP effort allocation (MP trustee/delegate representational style and independence from party). We also find that instrumental concerns do not provide a powerful explanation for these preferences. Most surprisingly, there is little evidence of an association between voters' preferences over effort allocation and their beliefs about where MP's have an influence in the British political system. Instead, variation in preferences is more consistent with heuristic reasoning, whereby voters use more basic dispositions – here, their local-cosmopolitan orientation – as criteria for assessing effort allocation.

These results have implications for understanding cross-national patterns in constituent preferences over the effort allocation trade-off. In previous research, legislative institutions, and in particular the degree to which such institutions afford individual representatives influence over national policy, play a central and direct role as determinants of voter preferences (Cain et al. 1987). In contrast, our findings imply that cross-national variation in preferences over effort allocation may well be better explained by variation in the strength of local identities in different countries. Future research could test this possibility by deploying the conjoint analysis approach developed here in countries other than the UK. Such

comparative research would also allow us to test whether political institutions more broadly may have an *indirect* influence on voter effort allocation preferences by shaping identities and dispositions among voters.

What do our findings tell us about how representatives' activities might influence electoral choices? On the one hand, our experiments show that the impact of MP effort allocation is weaker in more competitive partisan settings, which are more representative of a general election contest. Compounding this, voters in a real election will in all likelihood have less precise information about their MP's activities than our experimental subjects. However, our experiments nevertheless offer unprecedentedly detailed information as to *how* MP effort allocation is likely to affect vote choices when it does so, and this type of information can inform future observational studies of the relationship between legislators' effort allocation and their electoral support. In particular, since our experiments show that the key distinction voters are likely to make is between an MP who has an almost complete focus on national policy and one who does not, we would strongly suggest that such studies test for a non-linear relationship.

Finally, we argued earlier that one reason why establishing the nature of voter preferences is important is to examine whether there is a mismatch between citizen expectations and legislators' actual effort allocation decisions, an important question for democratic representation (Grant & Rudolph 2004; Griffin & Flavin 2011). For the case of Britain, we can conclude that this mismatch is relatively minor. Despite fears that voters might make unrealistic demands for constituency service (Cain et al. 1987; Norton & Wood 1993: 155; Wright 2010), they in fact tend to prefer MPs to engage in a moderate balance of constituency and national policy work at Westminster. Furthermore, research by Korris (2011: 6) finds that MPs newly elected in 2010 allocate 63% of their time to constituency service and 37% to national policy work; this is strikingly similar to the 60-40 split that was most preferred in our experiments. From this perspective, our findings are encouraging with regard

to the quality of the representative-constituent link in the UK.

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Figure 1: Screen shots from conjoint experiment (Study 1)

People have different opinions about what their Member of Parliament should do.

In the next few questions, we will ask you to compare two example MPs. We will call them MP 1 and MP 2. For each pair of MPs, please say which one you would personally prefer to have as your MP in the House of Commons.

You will be asked to make a total of **five** comparisons. Please remember there are no right or wrong answers.

Comparison 1

Please read the descriptions of these two MPs carefully.

MP 1 has been a **Conservative** MP for **10 years**

- **He** spends on average **1 day** of a 5-day week reviewing and working on national policies in Parliament, and
- The remaining **4 days** working on local constituency issues.
- He **rarely** speaks out or votes against his party leadership.

MP 2 has been a **Labour** MP for **21 years**

- **She** spends on average **4 days** of a 5-day week reviewing and working on national policies in Parliament, and
- The remaining **1 day** working on local constituency issues.
- She **sometimes** speaks out or votes against her party leadership.

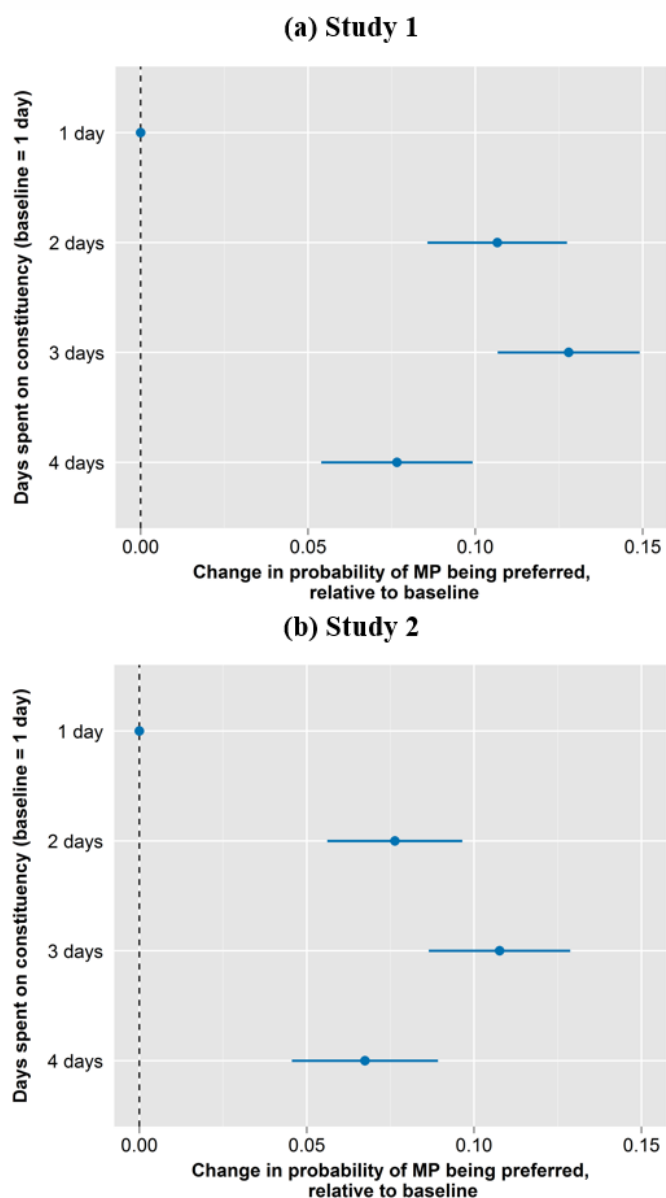
Based on this information, which **ONE** of these two MPs would you prefer to have as your MP in the House of Commons?

☐ MP 1

☐ MP 2

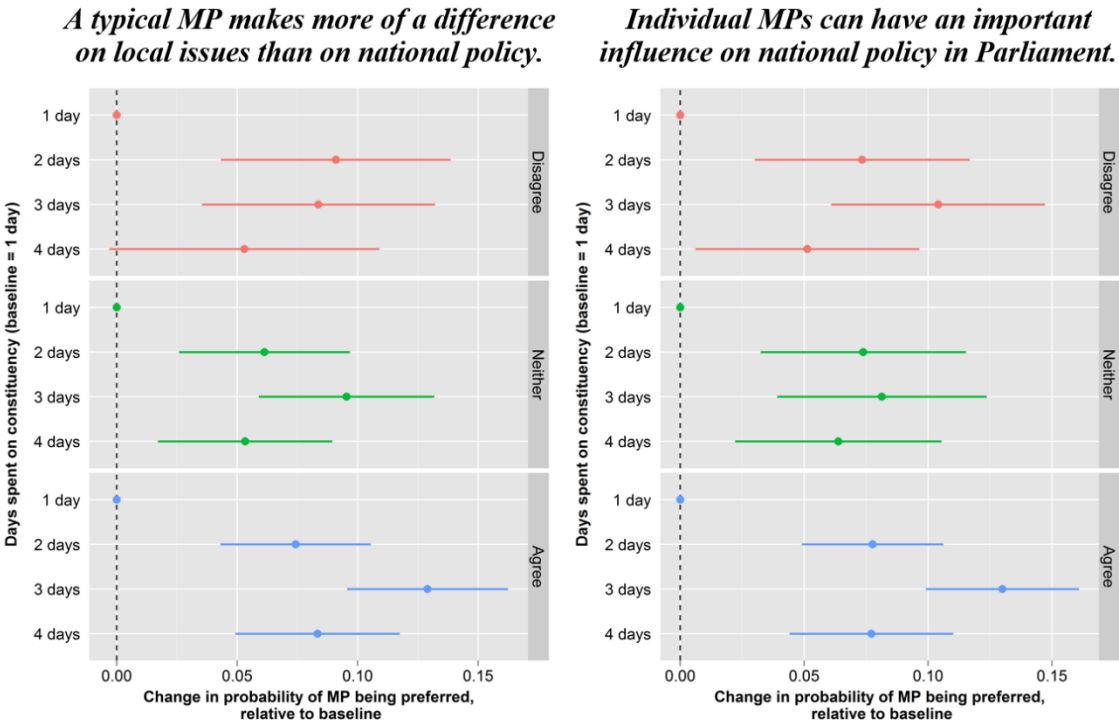
Note: The top panel shows the introductory screen that all respondents saw before starting the experiment. The lower panel shows a randomly generated example choice task. Each respondent completed five such tasks.

Figure 2: Effects of MP attributes on probability of being preferred by voter (Study 1 and Study 2)



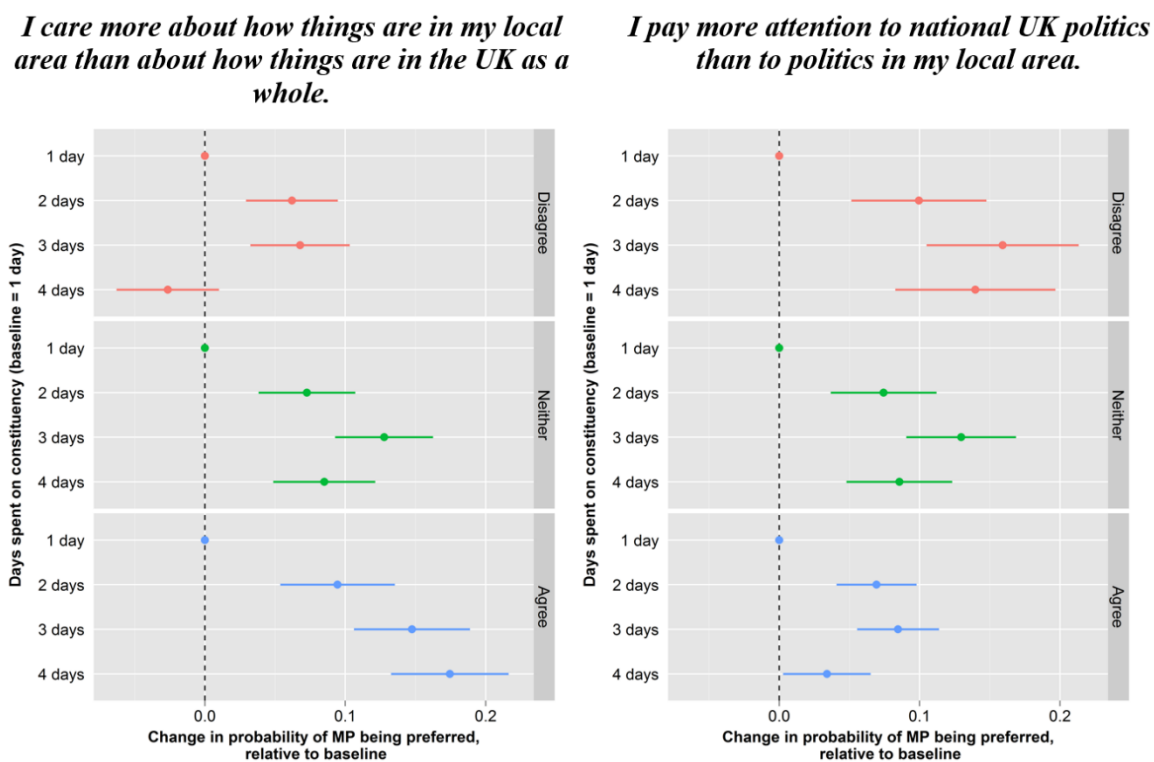
Note: MPs in both studies allocated between 1 and 4 days per week to constituency service and the remainder to national policy work. Points show the average marginal component effect relative to the baseline (1 day spent on constituency work). Bars show 95 per cent confidence intervals. For results on the other MP attributes included in the conjoint analysis, see the supporting information.

Figure 3: Effect of MP constituency focus by perception of MP impact (Study 2)



Note: Each plot shows estimates for British voters grouped by their level of agreement with the statement above the plot. Respondents recorded their level of agreement with each statement on a five-point scale, and we re-coded these responses into three groups: ‘disagree’, ‘neither’, and ‘agree’

Figure 4: Effect of MP constituency focus by local-cosmopolitan orientation (Study 2)



Note: Each plot shows estimates for British voters grouped by their level of agreement with the statement above the plot. Respondents recorded their level of agreement with each statement on a five-point scale, and we re-coded these responses into three groups: ‘disagree’, ‘neither’, and ‘agree’.

House or Home? Constituent preferences over legislator effort allocation

Supporting information

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Appendix 1: Full text of conjoint analysis experiments

Below is the full text of the two conjoint analysis survey experiments. The text in parentheses is the text that varied randomly across tasks. The text in bold also appeared in bold on screen.

Study 1:

MP (1/2) has been a (**Labour/Conservative**) MP for (**3/10/21**) years.

- (**He/She**) spends on average (**1 day/2 days/3 days/4 days**) of a 5-day week reviewing and working on national policies in Parliament, and
- The remaining (**4 days/3 days/2 days/1 day**) days working on local constituency issues.
- (**He/She**) (**never/rarely/sometimes/often**) speaks out or votes against (**his/her**) party leadership.

Study 2:

MP 1 is a (**Labour/Conservative**) MP.

- When considering national policy, (**he/she**) mainly thinks about (his/her) (**own personal/constituents'**) views.
- If these views on policy differ from those of the party leadership (he/she) (**nevertheless tends not to speak out/tends to speak out** at internal party meetings, and **also publicly/tends to speak out** at internal party meetings, but **not publicly**).
- (**He/She**) spends on average (**1 day/2 days/3 days/4 days**) of a 5-day week reviewing and working on national policies in Parliament, and
- The remaining (**4 days/3 days/2 days/1 day**) days working on local constituency issues.

Appendix 2: Follow-up questions

Below is the full text of the questions used in the main body of the text. These questions were asked immediately after the conjoint analysis survey experiments.

Study 1:

During the last 3 or 4 years, did you or someone you know well seek personal assistance from your local MP?

Yes, I did
Yes, someone I know well did
No, neither I nor anyone I know did
Don't know

If you were concerned about a local issue, how likely, if at all, would you be to contact your MP personally regarding the issue?

Very likely
Fairly likely
Not very likely
Not likely at all
Don't know

Study 2:

To what extent do you agree or disagree with each of the following statements? (Please tick one option on each row) (order randomized)

1. I care more about how things are going in my local area than about how things are going in the UK as a whole.
2. I pay more attention to national UK politics than to politics in my local area.
3. An MP makes more of a difference on local issues than on national policy.
4. Individual MPs have an important influence on national policy in Parliament.

Strongly agree
Tend to agree
Neither agree nor disagree
Tend to disagree
Strongly disagree
Don't know

Appendix 3: Full conjoint analysis results

In the main body of the paper, when presenting results from our two conjoint analysis experiments we concentrate solely on the effects of a single MP attribute: how many days per week the fictional MP spends doing constituency work as opposed to national policy work. This is because effort allocation is the substantive focus of the paper. However, as discussed in the main text, the fictional MPs presented to respondents in our experiments each have a number of attributes, whose levels vary randomly. We examine the effects of some of these attributes in more detail in other ongoing work. However, for completeness, Figure S1 and Figure S2 plot estimated average marginal component effects (AMCE) (Hainmueller et al. 2014) for all MP attributes included in Study 1 and Study 2, respectively. In both figures, we include estimates for the MP time allocation attribute at the top for comparison.

Study 1

In Study 1, fictional MPs were characterised by four attributes in addition to MP time allocation: MP party affiliation, frequency of dissent, sex, and tenure in Parliament. We can draw a number of conclusions about the effects of these attributes based on Figure S1. Taking MP party affiliation first, we see that Labour MPs enjoy a small but statistically significant advantage over their Conservative counterparts. Britons were on average 2.6 [0.8, 4.4] percentage points more likely to prefer a Labour MP than a Conservative MP. While the effect of MP party here is small, note that it averages over subjects with different partisan preferences. One would expect the effect of MP party to be much greater in subpopulations that have particularly strong partisan preferences and more detailed analysis of the relevant subsamples, not reported here, confirms this expectation. This slight average preference for Labour MPs is consistent with the results of opinion polls fielded around the same time as our survey. Thus, vote intention polls fielded in the same week as our survey showed an estimated

lead for Labour over the Conservatives of at least 9 percentage points (see <http://ukpollingreport.co.uk/voting-intention-2>).

Second, turning to MP dissent, we find that British voters strongly prefer to have an MP who exhibits independence from his or her party. Even comparing an MP who *never* speaks out or votes against the party (the baseline) to one who does so *rarely*, citizens are 13.0 [11.1, 15.0] percentage points more likely to prefer the latter. The effects of MP dissent are generally greater in magnitude than MP time allocation. (See Campbell et al. 2014 for further discussion of these results.)

Third, in contrast to party affiliation and independence, the sex of an MP makes very little difference to the probability an MP is preferred: a male MP is 0.9 percentage points less likely to be preferred than a female MP, but the confidence interval for this effect overlaps with zero.

Fourth, we find only a weak preference for MPs with greater parliamentary experience: there is a very small positive effect of an MP having 10 or 21 years of experience compared to the baseline level of 3 years, and the effect is only significant in the case of 21 years.

Study 2

In Study 2, fictional MPs were again characterised by four attributes in addition to MP time allocation, but this time these attributes were: MP party affiliation, the chief influence on the MP's policy views, nature of MP dissent, and MP sex. We draw conclusions about the effects of these attributes based on Figure S2.

First, regarding MP party affiliation, as in Study 1 we find that Labour MPs enjoy a small but statistically significant advantage over their Conservative counterparts. Voters were this time 3.5 [1.9, 5.3] percentage points more likely to prefer a Labour MP than a Conservative MP on average.

Second, we find that British voters strongly prefer a delegate-type MP to a trustee-type. Specifically, MPs whose policy stances were mainly influenced by the views of their constituents were on average 22.8 [21.3, 24.4] points more likely to be chosen than those who were mainly influenced by their own views.

Third, we find that when it comes to the nature of dissent in which an MP engages, British voters most prefer an MP who expresses disagreement with their party leadership at internal party meetings and also publicly. MPs who tend to dissent both internally and externally were on average 23.4 [21.6, 25.2] points more likely to be chosen by voters than MPs who tend not to dissent against their party leadership at all, an effect comparable in magnitude with that of being a delegate-type MP. MPs who only tended to dissent internally with their party leadership when they disagreed with a policy were also much more likely to be preferred by voters than MPs who tended not to dissent at all. At 13.7 [11.9, 15.4] the effect of internal dissent is clearly lower than that of combined internal and external dissent. (See Campbell et al. 2014 for further discussion of these results.)

Finally, as with Study 1, the point estimate of the effect of an MP being male is again negative and relatively small. However, in this study, the 95 per cent confidence interval for the effect does not overlap with zero, suggesting that British voters on average tend to slightly prefer a female to a male MP.

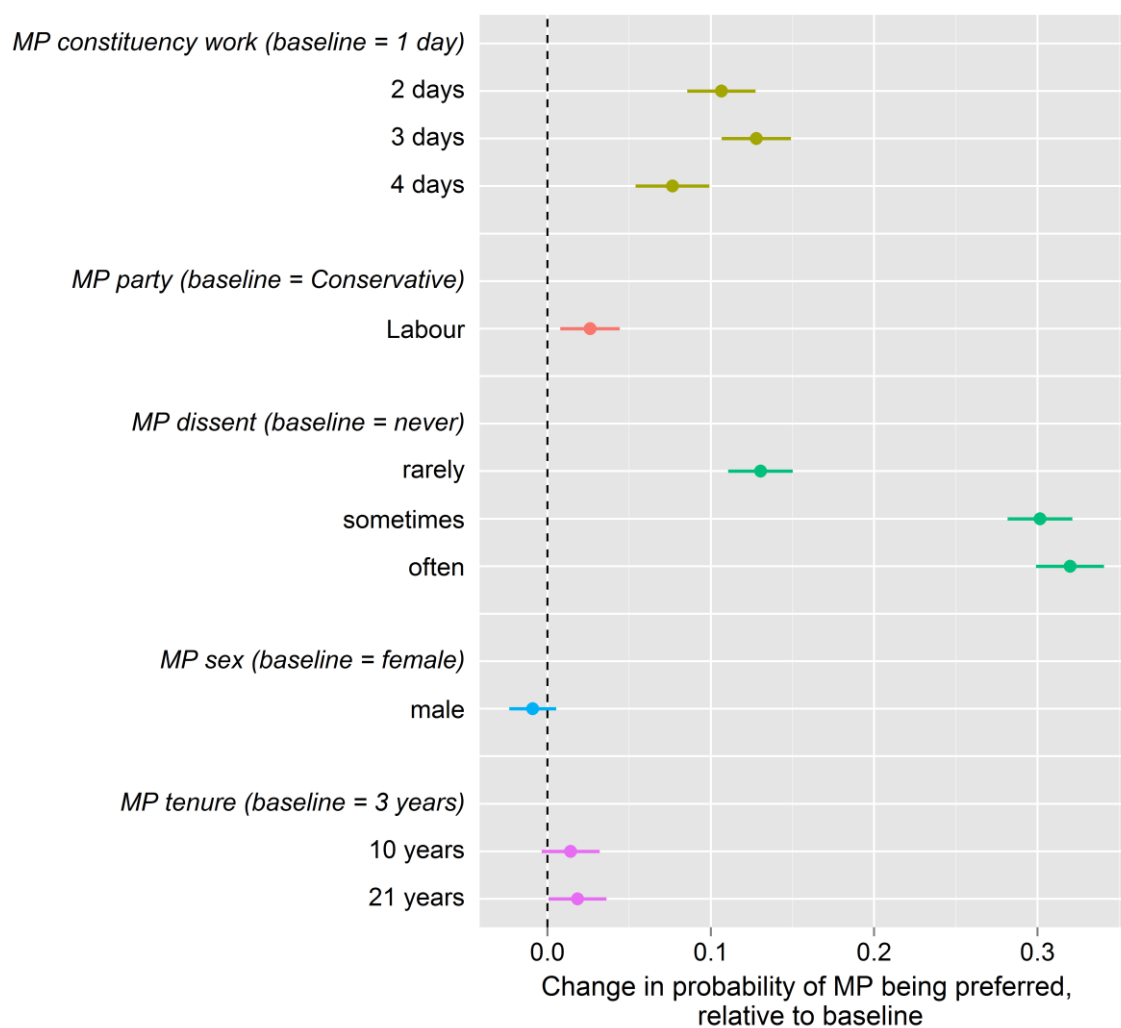
Benchmarking effects against co-partisanship

One way to gauge the magnitude of the effect of each MP attribute in the conjoint analyses is to compare it to the effect of voter-MP co-partisanship. To measure co-partisanship in our conjoint analysis data, we code whether the party affiliation of an MP is the same as respondent self-reported party identification or not (in cases where the respondent does not identify with any party we assign the observation to the latter category). Figure S3 plots the estimated effects of MP constituency focus in Study 1 alongside the effect of co-partisanship

in the same study. The effect of voter-MP co-partisanship is relatively strong, increasing the probability that a voter chooses the MP by 17 points. However, at between 7 and 13 points, the effects of each non-baseline level of MP constituency focus are by no means dwarfed by the effect of co-partisanship.

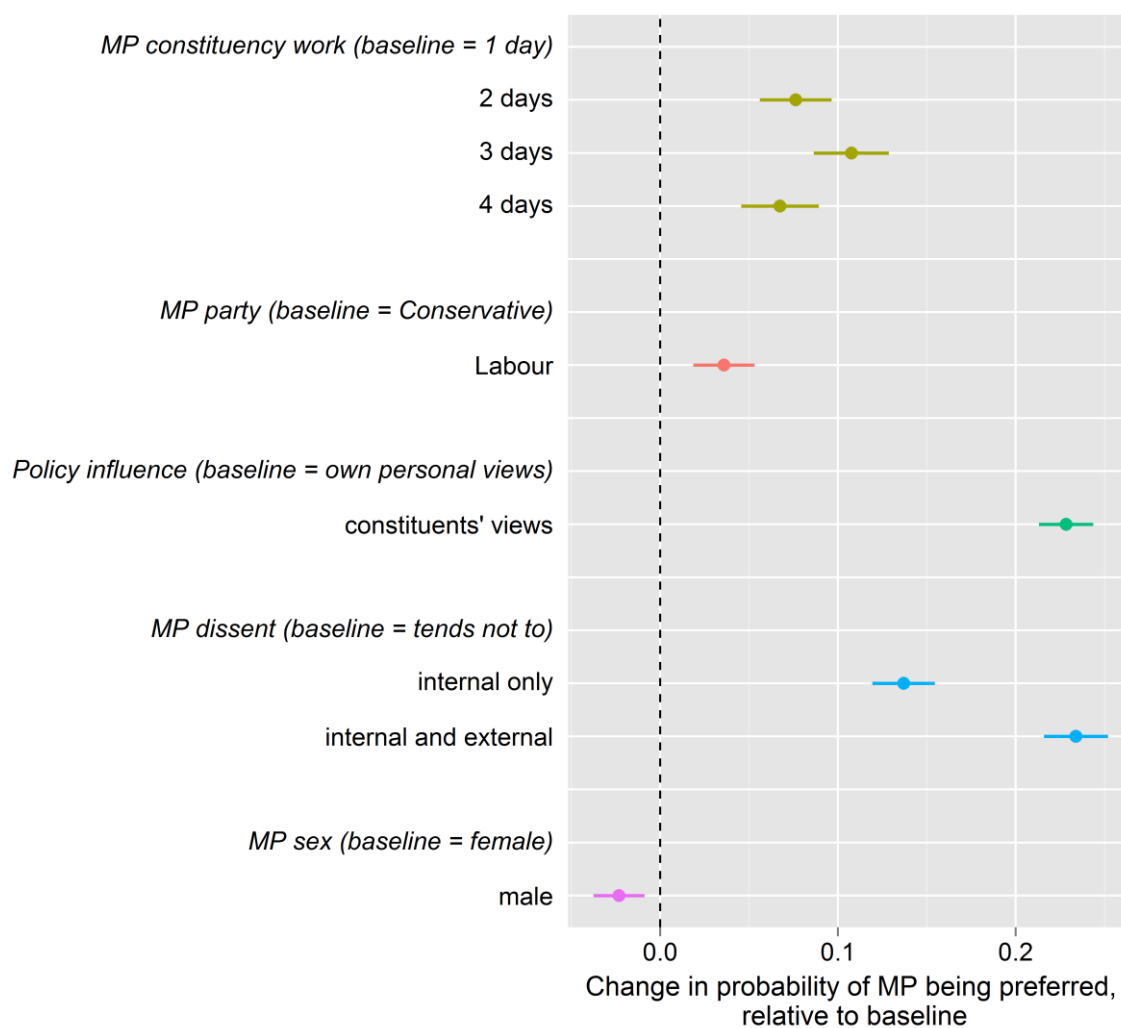
Of course, co-partisanship should dominate the conjoint analysis responses most when voters have to choose between MPs from differing parties. Figure S4 compares the effects of MP constituency focus and co-partisanship when we subset our Study 1 data to different-party comparisons. Here, the effect of co-partisanship is very strong, increasing the probability of support for an MP by almost 35 points. This is much larger than the effects of MP constituency work, as one would expect in a party-dominated political system. Nevertheless, the effects of MP constituency work are still statistically distinguishable from zero and – at between 5 and 10 percent in size – non-trivial in terms of magnitude.

Figure S1: Effects of MP attributes on probability of being preferred by voter, Study 1



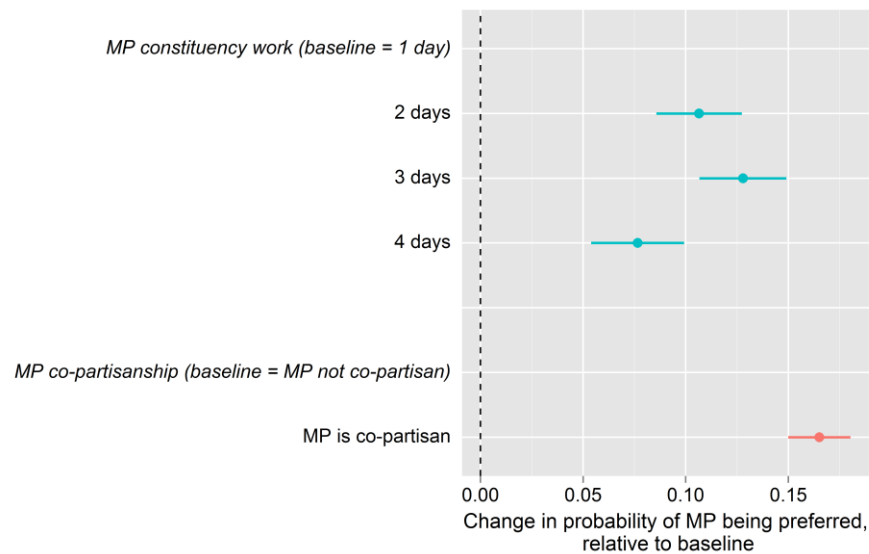
Note: Points show the average marginal component effect of each MP attribute level compared to the baseline level of the attribute. Bars show 95 per cent confidence intervals.

Figure S2: Effects of MP attributes on probability of being preferred by voter, Study 2



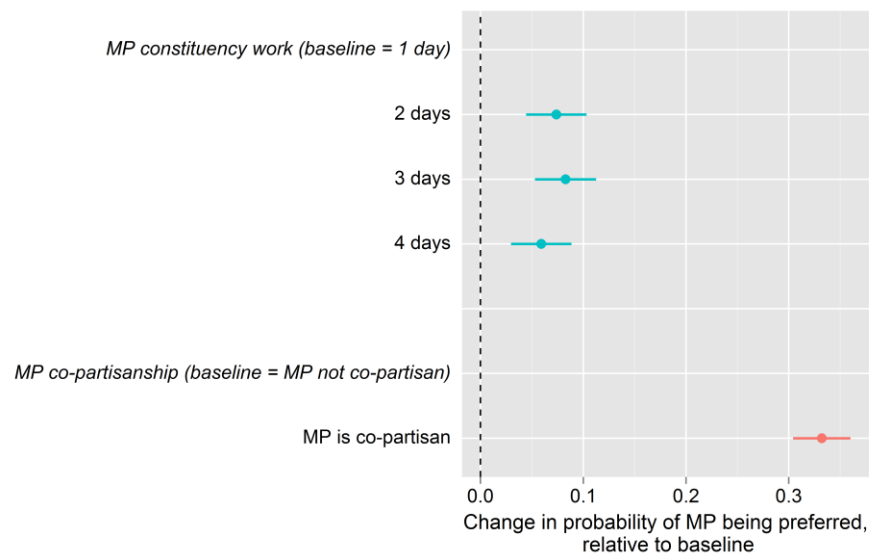
Note: Points show the average marginal component effect of each MP attribute level compared to the baseline level of the attribute. Bars show 95 per cent confidence intervals.

Figure S3: Comparing the effects of MP constituency focus and voter-MP co-partisanship (Study 1)



Note: Points show the average marginal component effect of each MP attribute level compared to the baseline level of the attribute. Bars show 95 per cent confidence intervals.

Figure S4: Comparing the effects of MP constituency focus and voter-MP co-partisanship, different-party comparisons only (Study 1)



Note: Points show the average marginal component effect of each MP attribute level compared to the baseline level of the attribute. Bars show 95 per cent confidence intervals.

Appendix 4: Conjoint Analysis Diagnostics

In this section we report on the conjoint analysis diagnostic tests recommended in Hainmueller et al (2014).

Carryover effects

In our conjoint analysis experiment, each respondent undertakes five choice tasks. Our AMCE estimates assume that there is no ‘carryover’ from one choice task to another. In other words, a respondent’s choice between two MPs with a given set of attributes is unaffected by the MP profiles he or she has already been exposed to in previous choice tasks. To assess the plausibility of this assumption, we test whether the AMCE estimates are stable across each choice task by interacting each MP attribute with a set of choice task indicators. For every MP attribute in both Study 1 and Study 2, F-tests fail to reject the null hypothesis of no interaction between the MP attribute and the choice task at the 0.05 level of significance. Therefore, we are confident that our AMCE estimates are stable across choice tasks.

Profile order effects

Our AMCE estimates also assume that, for any given choice task, the effects of each MP attribute for the MP presented first in the choice task (i.e. for MP 1) are the same as those for the MP presented second in the choice task (MP 2). To test this assumption, we interact indicators for each MP attribute with an indicator for MP 2. For all five MP attributes in Study 1, F-tests fail to reject the null hypothesis of no interaction between the MP attribute and the MP 2 indicator at the 0.05 level of significance. In Study 2, for all five MP attributes except MP Party, F-tests fail to reject the null hypothesis of no interaction between MP attribute and MP 2 indicator at the 0.05 level of significance. For the MP Party attribute in Study 2, the F-test for an interaction with the MP 2 indicator is significant at the 0.05 level.

However, further inspection reveals that the interaction is very small in magnitude, with the effect of being a Labour MP reduced by 2 percentage points when the MP is listed second. Overall, then we conclude that there is little evidence of substantial profile order effects in our conjoint analysis experiments.

Randomization

By randomizing the assignment of MP attribute levels in our conjoint analysis we ensure that attribute levels are independent of respondent characteristics in expectation. However, we can still check whether there is good balance across treatment groups in terms of observable respondent characteristics. Since our respondent characteristics are mainly categorised, to assess balance we crosstabulate each MP attribute against a series of respondent demographic variables (social grade, age group, sex, party ID, qualifications, region). In each case, we use a χ^2 statistic to test the null hypothesis that the MP attribute levels are independent of the demographic variable. For Study 1, we find that all χ^2 tests are non-significant at the 0.05 level. For Study 2, all χ^2 tests are non-significant at the 0.05 level except that for the association between MP party and respondent party ID. However, inspection of the crosstabulation for these two variables reveals only small differences in party ID distributions across each MP party treatment group (differences in row proportions were all under 2 percent). Overall, we conclude that there is good balance in our experimental groups.

Attribute order effects

If we include too many MP attributes in our conjoint analysis respondents we might overwhelm respondents with information and risk the external validity of our findings. One indication of information overload might be that respondents ignore all but the first, or all but the last, MP attributes. One way of testing for this problem is to randomise the order in which MP attributes are presented to respondents and test whether this ordering interacts with MP

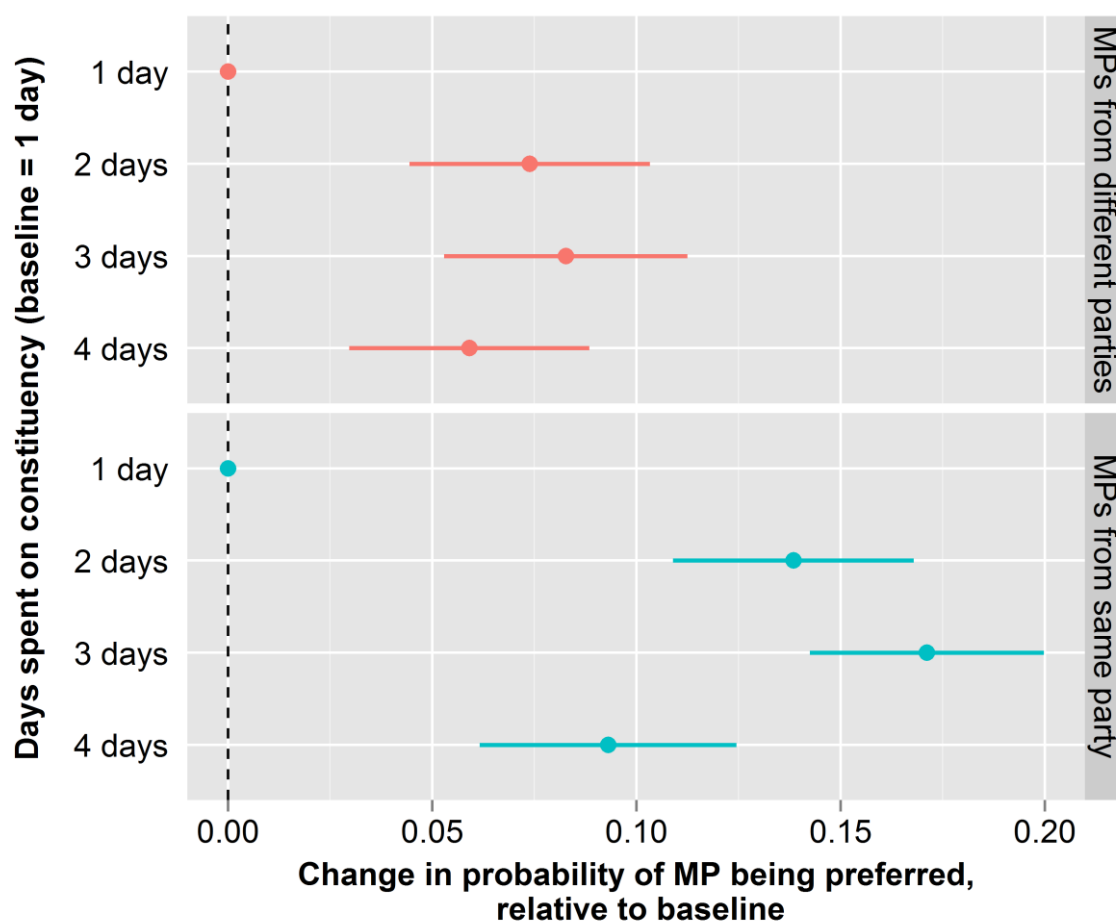
attribute effects.

We cannot perform this diagnostic test with our data: as discussed in the main text, because of the paragraph/bullet point format in which we present our MP vignettes, we do not randomise the ordering of the MP attributes in our conjoint analyses. However, we did vary the placement of our key MP attribute, time allocated to constituency and national policy work, respectively, across our two studies. In Study 1 the MP time allocation attribute was reported in the first two bullet points following the introductory sentence about the MP, while in Study 2 it was reported in the last two bullet points. As Figure 2 in the main text shows, the estimates AMCEs for MP time allocation levels are remarkably stable across both Study 1 and Study 2, with overlapping confidence intervals in each case. This is by no means conclusive evidence, but it does suggest a lack of attribute order effects for our key MP attribute of interest in this paper.

Appendix 5: Conjoint analysis results for same-party versus different-party comparisons

In the main body of the paper, we note that the presence of effects for effort allocation does not depend on whether respondents are choosing between MPs from the same party or between MPs from different parties. Moreover, the shape of the effects (in terms of relative magnitude) also remains the same. The results are presented in the Figure below.

Figure S5: Effect of MP constituency focus, same-party versus different-party comparisons (Study 1)



Note: The top estimates are those for choice tasks where the MPs are from different parties, the bottom estimates for when both MPs are from the same party (Labour or Conservative).

Appendix 6: Further analysis of voter characteristics and preferences over MP constituency focus

In our survey data we measure a number socio-demographic characteristics and political attitudes for each respondent. In the graphs below, we show that preferences over MP constituency time allocation (as estimated from our conjoint analysis experiment) do not appear to be strongly related to these characteristics or attitudes.

Figures S6 and S7 are referred to in the main text when we discuss our experimental evidence concerning the self-interested reasoning account of voter preferences over MP effort allocation. Both suggest that voters who are plausibly more likely to benefit from a constituency oriented MP do not appear to have a particularly strong preference for MPs who engage in more constituency work. Figure S6 compares AMCE estimates of MP days spent on constituency work for two groups of respondents: those who have sought personal assistance from an MP in the last 3-4 years, or know someone who has done so; and those for whom this is not the case. There are no clearly discernible differences in the estimated effects of MP constituency work across the two groups: the maximum difference in AMCE point estimates across the two groups is only 3 per cent (for the AMCE of four MP days on constituency work), the confidence intervals for the estimated effects tend to overlap with each other, and an F-test fails to reject the null hypothesis of no interaction between MP constituency work and voter propensity to seek MP assistance ($P = 0.44$). Figure S7 breaks respondents into four social grade subgroups (AB, C1, C2, DE) and shows AMCE estimates of MP days spent on constituency work for each subgroup. Again, there are few clearly discernible differences in effects across subgroups, and an F-test fails to reject the null hypothesis of no variation in effects ($P = 0.58$).

Also discussed in the main text are Figures S8 and S9, which relate to the possibility that if voters are self-interested and reason instrumentally, it may be the case that perceptions

of the relative efficacy of MP constituency work and national policy work *condition* the relationship between how much a voter stands to benefit personally from constituency service and how much effort a voter prefers their MP to allocate to constituency service. Specifically, if we compare a group of voters who stand to benefit only a little from constituency service and a group who stand to benefit a great deal from constituency service, it may be that the latter group only prefers their MP to allocate substantially more effort to constituency work when they also believe that MPs can have a reasonable local impact through such work. To examine this possibility, we grouped respondents according to perceptions of the relative efficacy of MP constituency work and national policy work (based on levels of agreement with statements 1 and 2 in the main text). Then, within each of these groups we compared the estimated experimental effect of MP days spent on constituency work by respondent social grade (ABC1 versus C2DE), assuming again that respondents with higher social grades stand to benefit less from constituency work than those with lower social grades.¹⁶

We find little evidence that the effects of MP days spent on constituency work vary by social grade regardless of whether respondents see constituency work or national policy work as particularly efficacious. Figure S8 shows that, for each level of agreement with the statement that ‘a typical MP makes more of a difference on local issues than on national policy’, the effects of MP time allocation tend to be similar in magnitude across both social grade groups and an F-test fails to reject the null hypothesis that such effects are independent of the interaction between social grade and respondent perception of MP relative impact ($P =$

¹⁶ Since we are already subsetting our data into three groups according to levels of agreement with statements 1 and 2, here we group respondents into two (rather than four) social grade groups: ABC1 and C2DE. Our substantive results do not change when we break down respondents into the more fine-grained four-way social grade categorisation (AB, C1, C2 and DE)

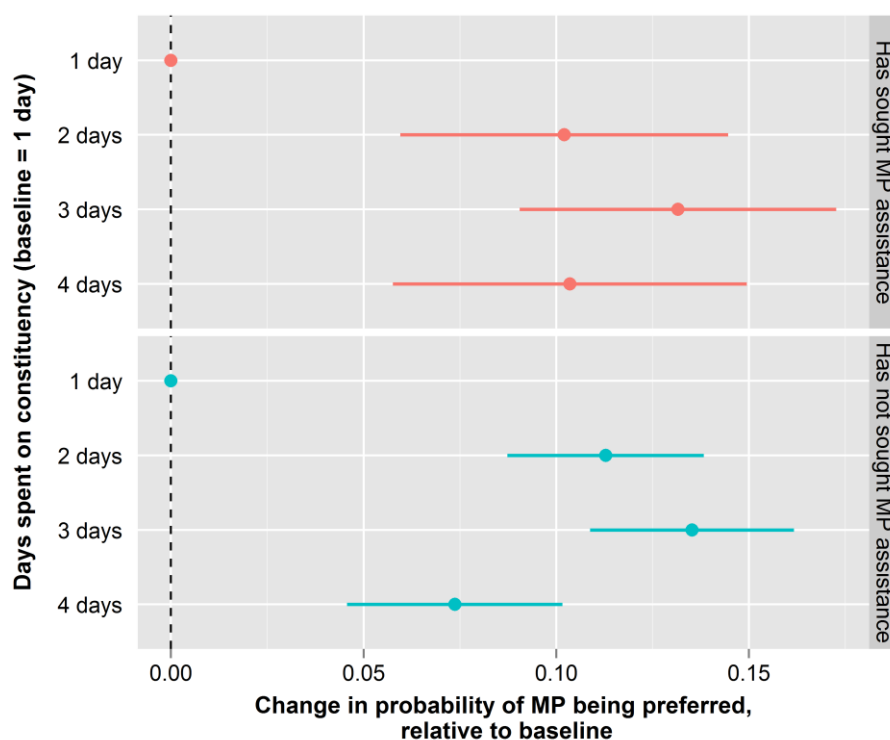
0.33).¹⁷ In Figure S9 the effects of MP effort allocation tend to be similar in magnitude for both social grade groups the upper two panels. In the lower panel – i.e. among respondents for whom MP parliamentary influence is relatively high – the estimated effects of an MP spending 3 and 4 days per week (as opposed to the 1 day per week baseline) on constituency work is slightly larger in the C2DE group than the ABC2 group. However, t-tests indicates that these particular difference are not significant ($P = 0.46$ and $P = 0.18$).¹⁸ Furthermore, if voters were self-interested and reasoned instrumentally we would expect the difference to be in the opposite directions (assuming that ABC1 respondents stand to gain less from constituency work relative to national policy work). We find similar results when we proxy likely personal benefits from constituency work by household income instead of social grade.

The remaining figures show that preferences over MP constituency effort allocation do not appear to be strongly related to other background characteristics, co-partisanship with MP (Figure S10); voter age-group (S11); gender (S12); educational qualifications (S13); region (S14); urban-rural location (S15); and population density (S16).

¹⁷ Consistent with the instrumental and self-interested reasoning account, when respondents agree that MPs make more of a difference on local issues than on national policy, the estimated effect of an MP spending 3 days per week (as opposed to the 1 day per week baseline) on constituency work is slightly larger in the C2DE group than the ABC2 group. However, a t-test indicates that this particular difference is not significant ($P = 0.16$), and for the same perception group, the estimated effect of an MP spending 4 days per week on constituency service varies very little by social grade.

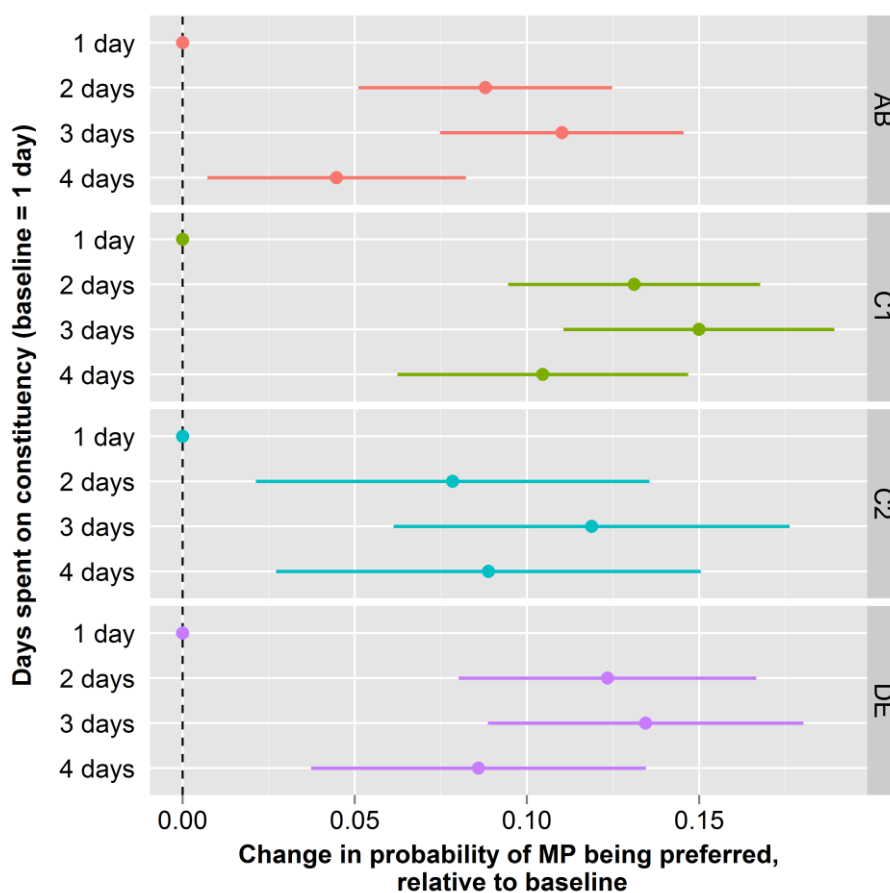
¹⁸ An F-test also fails to reject the joint null hypothesis that the effects of MP days spent on constituency work are independent of the interaction between social grade and respondent agreement with statement 2 ($P = 0.33$).

Figure S6: Effect of MP constituency focus conditional on whether subject (or someone they know well) has sought personal assistance from MP in last 3-4 years (Study 1)



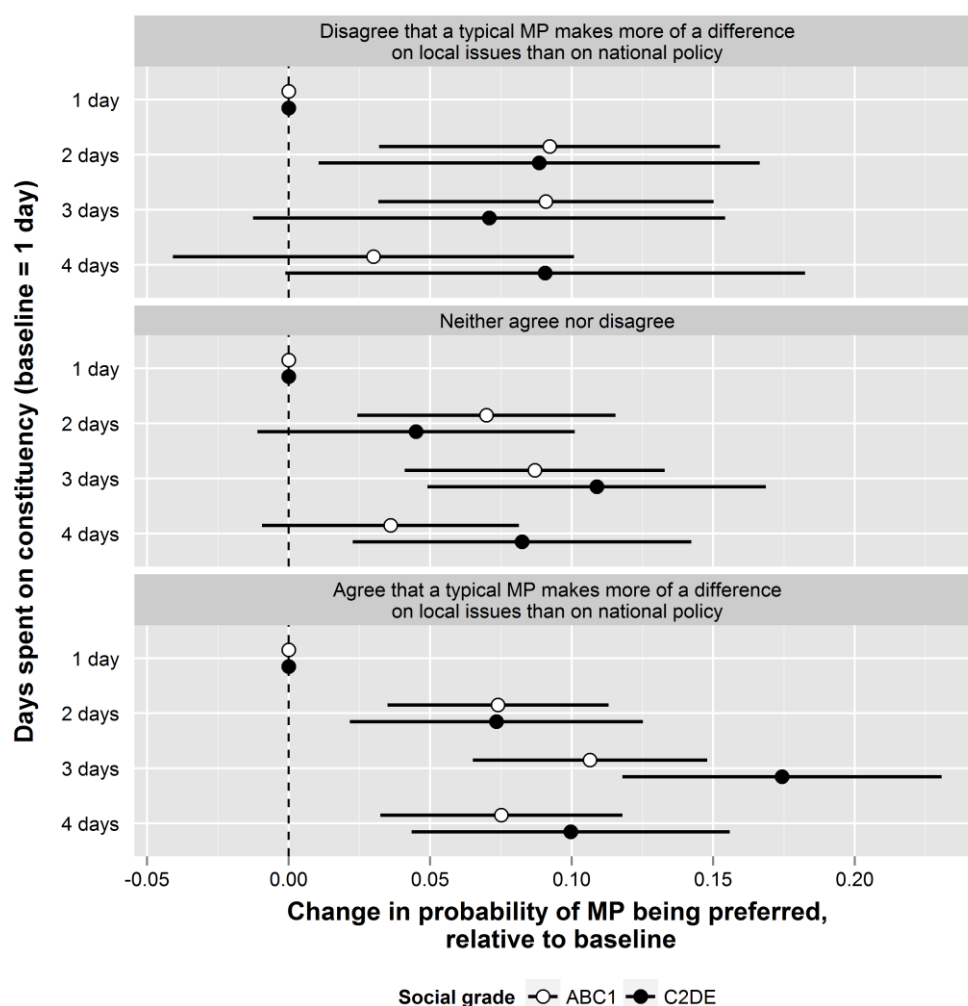
Note: The top estimates are for voters who have sought personal assistance from their MP in the last 3-4 years or else know someone who has done so (22.9% of respondents); the bottom estimates are for those for whom this is not the case (67.5% of respondents). Data from Study 1.

Figure S7: Effect of MP constituency focus by subject social grade (Study 1)



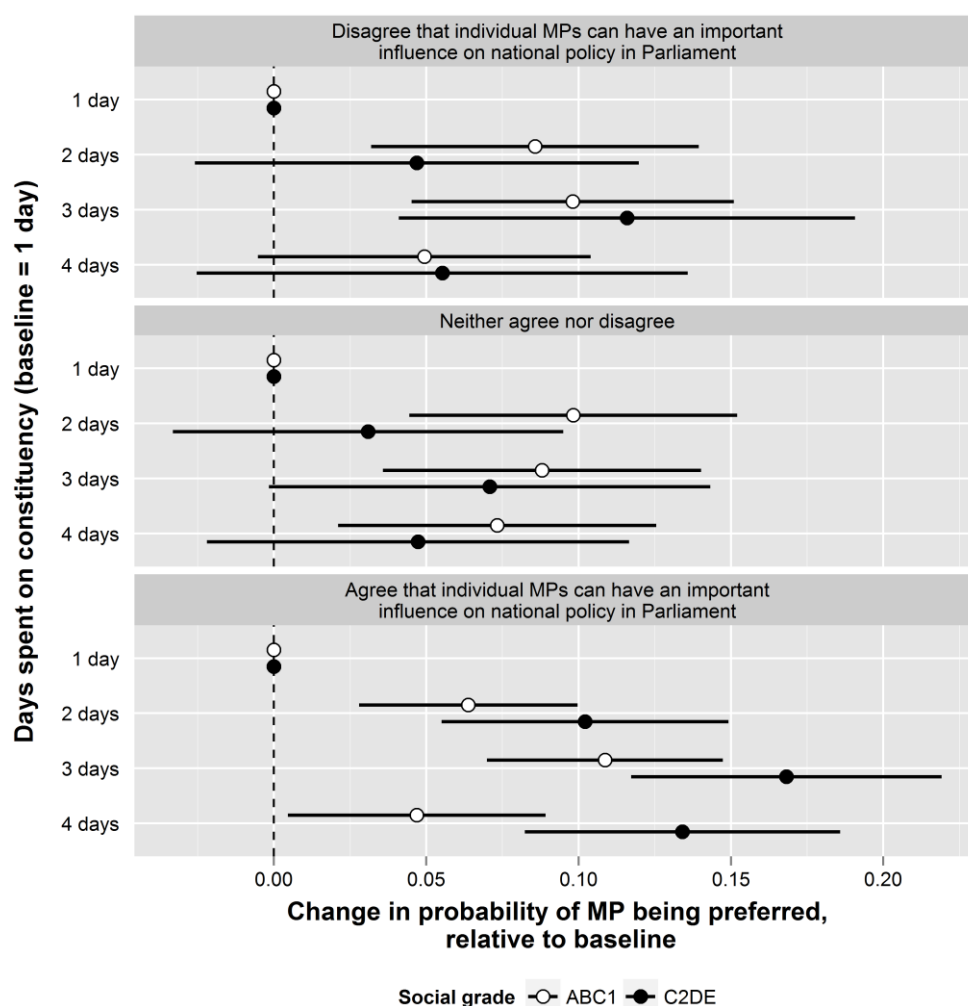
Note: Each panel depicts estimate for voters with a different social grade. The social grades are: AB, upper middle class or middle class (36.3% of respondents); C1, lower middle class (29.4%); C2, skilled working class (13.5%); DE, working class or not working (20.8%). Data from Study 1.

Figure S8: Effect of MP constituency focus by subject perceptions of MP local influence and subject social grade (Study 2)



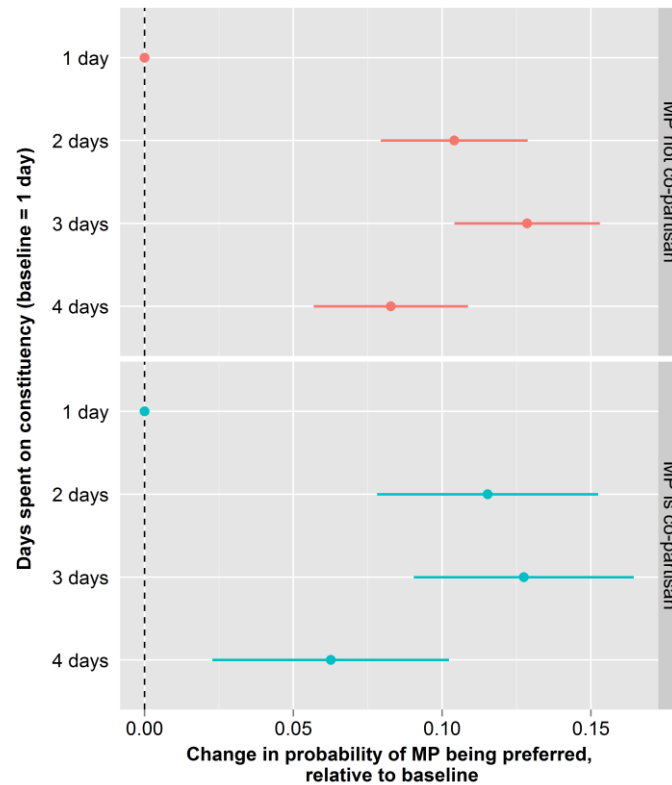
Note: Each panel shows estimates for British voters grouped by their level of agreement with the statement that ‘a typical MP makes more of a difference on local issues than on national policy.’ Respondents recorded their level of agreement with each statement on a five-point scale, and we re-coded these responses into three groups: ‘disagree’, ‘neither’, and ‘agree’. Within each panel, estimates are graphed separately for respondents classified in the ABC1 and C2DE social grade groups, respectively.

Figure S9: Effect of MP constituency focus by subject perceptions of MP parliamentary influence and subject social grade (Study 2)



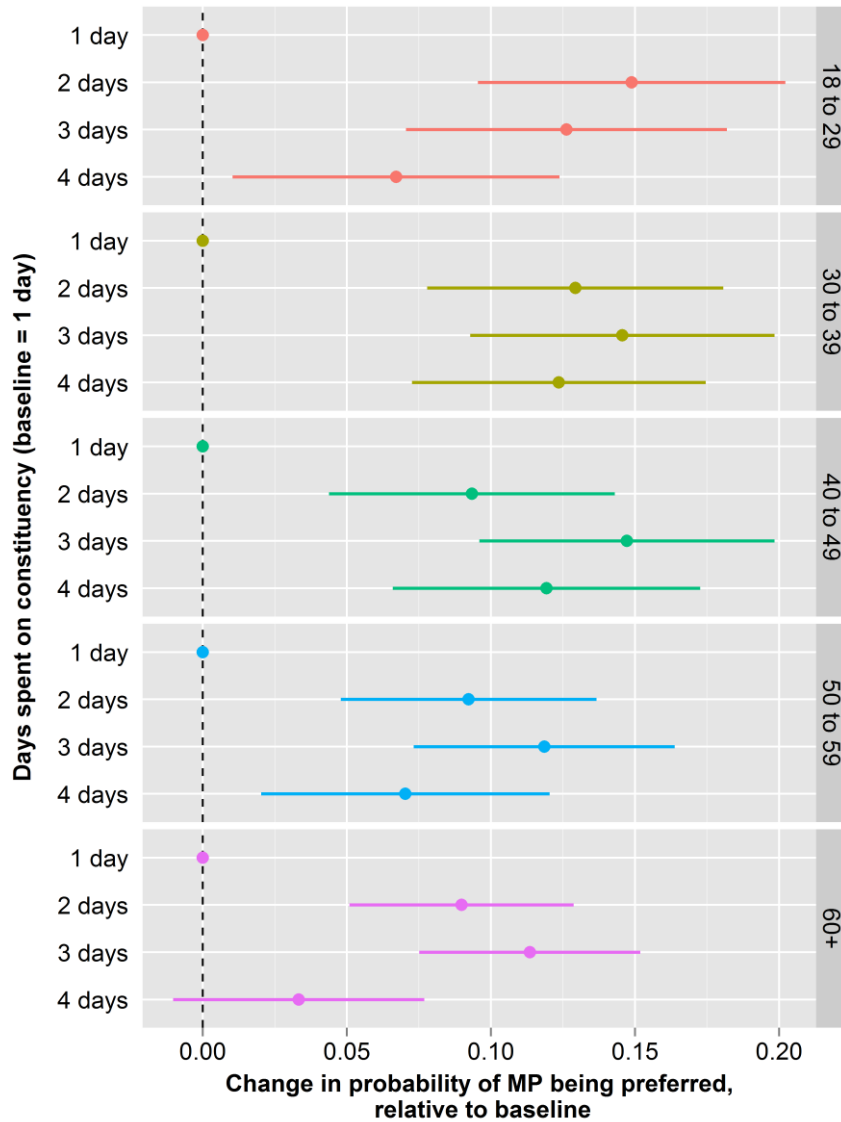
Note: Each panel shows estimates for British voters grouped by their level of agreement with the statement that ‘individual MPs can have an important influence on national policy in Parliament.’ Respondents recorded their level of agreement with each statement on a five-point scale, and we re-coded these responses into three groups: ‘disagree’, ‘neither’, and ‘agree’. Within each panel, estimates are graphed separately for respondents classified in the ABC1 and C2DE social grade groups, respectively.

Figure S10: Effects of MP constituency focus by voter-MP co-partisanship



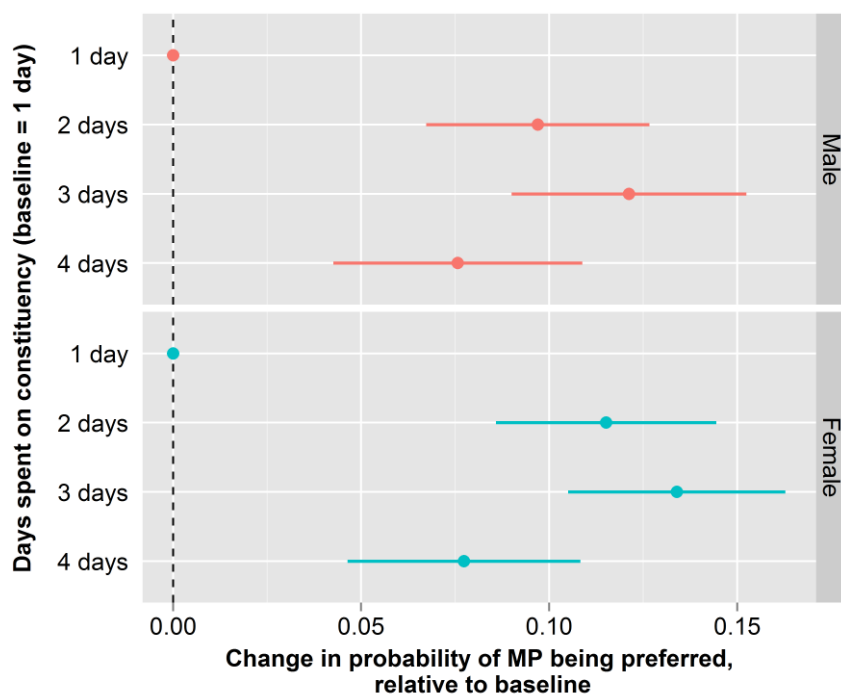
Note: Based on Study 1. The top panel reports AMCE estimates for MP constituency time allocation when the respondent and MP are not co-partisans (i.e. the respondent does not identify with the party with which the MP is affiliated). The bottom panel reports AMCE estimates for MP constituency time allocation when the respondent and MP are co-partisans. The effects of MP time allocation are similar in both panels, indicating that voters' preferences over MP constituency focus do not depend on whether or not the MP is a co-partisan. Supporting this, an F-test fails to reject the null hypothesis of no interaction between MP constituency time allocation and voter-MP co-partisanship ($P = 0.68$).

Figure S11: Effects of MP constituency focus by voter age-group



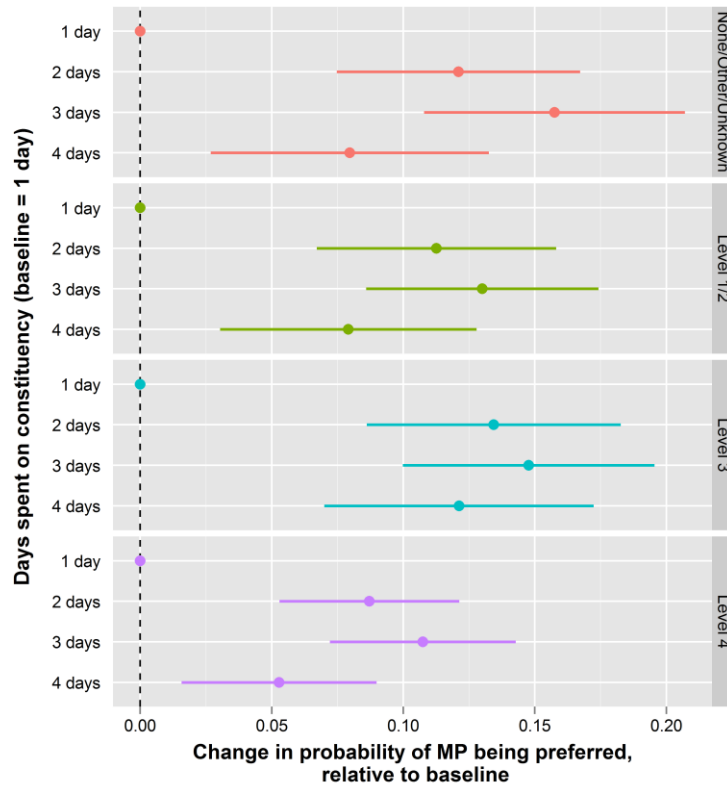
Note: Based on Study 1. Each panel reports AMCE estimates for MP constituency time allocation based on respondents from a particular age group. The effects of MP time allocation are similar across all panels, indicating that voters' preferences over MP constituency focus do not vary by age. Supporting this, an F-test fails to reject the null hypothesis of no interaction between MP constituency time allocation and voter age group ($P = 0.13$).

Figure S12: Effects of MP constituency focus by voter sex



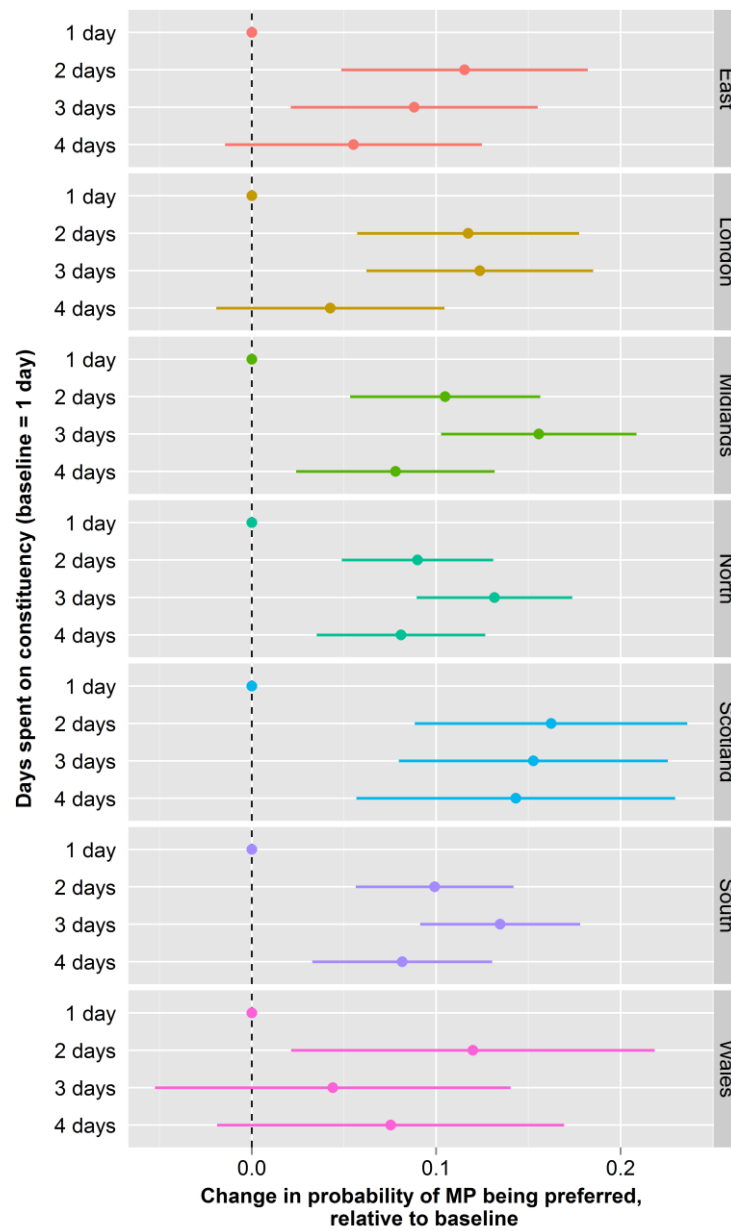
Note: Based on Study 1. The two panels report MP constituency time allocation AMCE estimates for male and female respondents, respectively. The effects of MP time allocation are similar across all panels, indicating that voters' preferences over MP constituency focus do not vary by sex. Supporting this, an F-test fails to reject the null hypothesis of no interaction between MP constituency time allocation and voter sex ($P = 0.35$).

Figure S13: Effects of MP constituency focus by voter educational qualification



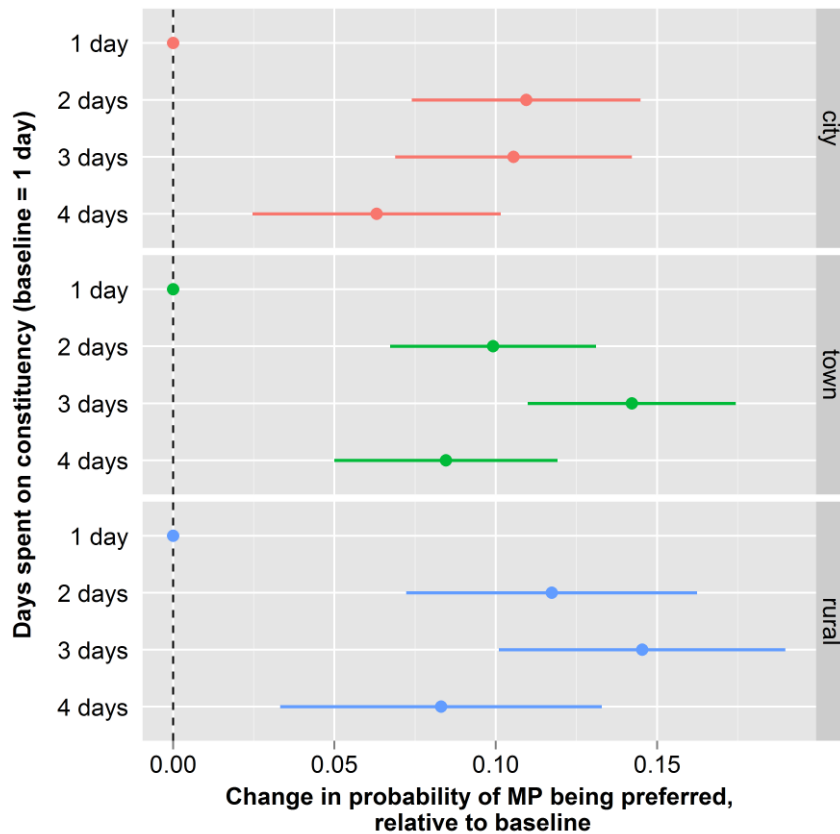
Note: Based on Study 1. Each panel reports MP constituency time allocation AMCE estimates for respondents with a different level of highest educational qualification (coded according to the UK National Qualifications Framework). The effects of MP time allocation are of similar magnitude across all panels. Supporting this, an F-test fails to reject the null hypothesis of no interaction between MP constituency time allocation and voter qualifications ($P = 0.63$). Overall, we have no evidence that that voters' preferences over MP constituency focus vary by level of education.

Figure S14: Effects of MP constituency focus by region



Note: Based on Study 1. Each panel reports MP constituency time allocation AMCE estimates for respondents from a different government region in Great Britain. The effects of MP time allocation are of similar magnitude across all panels. Supporting this, an F-test fails to reject the null hypothesis of no interaction between MP constituency time allocation and respondent region ($P = 0.53$). Overall, we have no evidence that that voters' preferences over MP constituency focus vary by region.

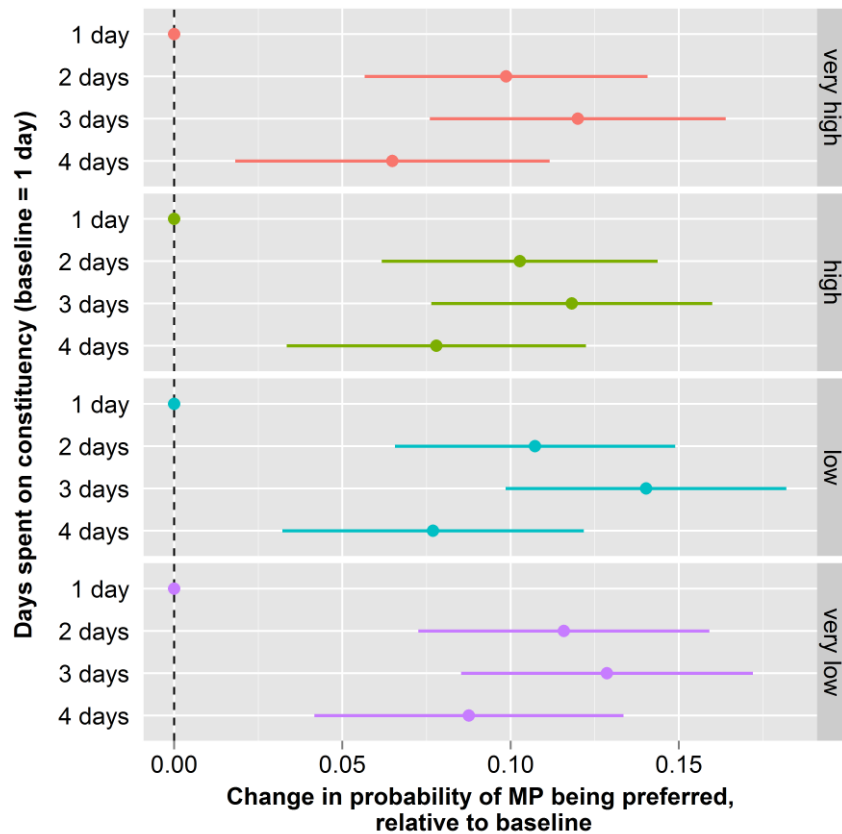
Figure S15: Effects of MP constituency focus by urban-rural location



Note: Based on Study 1. Each panel reports MP constituency time allocation AMCE estimates for respondents who report residing in city, town and rural locations respectively. The effects of MP time allocation are of similar magnitude across all panels. Supporting this, an F-test fails to reject the null hypothesis of no interaction between MP constituency time allocation and respondent region ($P = 0.56$). Overall, we have no evidence that that voters' preferences over MP constituency focus vary by urban-rural location.

Respondent rural-urban location classification is based on answers to the question: "Which of the following do you think best describes where you live? 1. A city; 2. A town; 3. The suburbs of a city; 4. The suburbs of a town; 5. A village or the countryside; 6. Don't know." For the graph, answers 1 and 3 were coded as "City"; answers 2 and 4 were coded as "Town"; answer 5 was coded as "Rural"; and answer 6 was coded as missing. We obtain similar results if we recode this to "Urban" (1 and 2), "Suburban" (3 and 4) and "Rural" (5) categories.

Figure S16: Effects of MP constituency focus by population density



Note: Based on Study 1. Each panel reports MP constituency time allocation AMCE estimates for respondents whose constituency is classed as having very high, high, low, or very low population density. The effects of MP time allocation are of similar magnitude across all panels. Supporting this, an F-test fails to reject the null hypothesis of no interaction between MP constituency time allocation and respondent region ($P = 0.997$). Overall, we have no evidence that that voters' preferences over MP constituency focus vary by population density of constituency.

Respondent constituency location is provided by YouGov. Constituency population density is calculated by combining information on constituency area from Ordinance Survey shapefiles with information on size of electorate from Norris (2010). The four categories of population density used in the plot are defined based on the quartiles of the distribution of population density in the survey sample.

Appendix 7: Robustness of local-cosmopolitanism interactions to controls

In the main body of the paper, we note that the interaction between voter local-cosmopolitanism and MP days spent on constituency service is robust to the inclusion of controls for respondent background characteristics which may be thought to predict local-cosmopolitanism. The results on which this claim rest are reported in Table S.1, below.

This table shows a series of OLS regression models for our binary measure of whether or not a hypothetical MP is chosen by a respondent. In Models 1 and 3 we replicate the results graphed in Figure 4 of the main text, estimating simple specifications where the only predictors are a set of indicators for the number of MP days spent on constituency service, indicators for levels of respondent local-cosmopolitanism, and the interaction between these two sets of indicators. In Model 1 we measure local-cosmopolitanism via respondent level of agreement with the statement “I care more about how things are in my local area than about how things are in the UK as a whole” (local identification). In Model 3 we use respondent agreement with the statement “I pay more attention to national UK politics than to politics in my local area” (national attention). Both measures are scored as “low” if the respondent strongly disagrees or tends to disagree with the statement, “medium” if the respondent neither agrees nor disagrees with the statement, and is “high” if the respondent tends to agree or strongly agrees with the statement.

In Models 2 and 4, we also control for a series of respondent background characteristics (some of which are significant predictors of local-cosmopolitan orientation) and their interaction with MP days spent on constituency service: annual household income (£19,999 or below, £20,000 to 39,999, or £40,000 and above); age (18-24, 25-39, 40-59, 60 and above); gender; social grade (AB, C1, C2, DE); education qualification (Level 1/2, Level 3, Level 4, None/Other/Unknown); and region. When we add these controls, the estimated coefficients on the interactions between MP days spent on constituency work and respondent local-cosmopolitanism remain relatively stable in terms of magnitude and significance.

Table S.1: Robustness of local cosmopolitanism interactions

	(1)	(2)	(3)	(4)
Intercept	0.474*** (0.011)	0.320*** (0.088)	0.399*** (0.017)	0.237*** (0.091)
Two days	0.062*** (0.017)	0.341** (0.146)	0.099*** (0.025)	0.364** (0.143)
Three days	0.068*** (0.018)	0.291** (0.149)	0.159*** (0.028)	0.413*** (0.155)
Four days	-0.026 (0.019)	0.097 (0.156)	0.140*** (0.029)	0.277* (0.160)
Medium local ID	-0.045*** (0.016)	-0.032* (0.019)		
High local ID	-0.079*** (0.017)	-0.085*** (0.021)		
Two days X Medium local ID	0.011 (0.024)	-0.014 (0.030)		
Three days X Medium local ID	0.060** (0.025)	0.049 (0.030)		
Four days X Medium local ID	0.111*** (0.026)	0.095*** (0.032)		
Two days X High local ID	0.032 (0.027)	0.053 (0.032)		
Three days X High local ID	0.080*** (0.028)	0.090*** (0.034)		
Four days X High local ID	0.201*** (0.028)	0.193*** (0.035)		
Medium nat. attn.			0.029 (0.021)	0.048* (0.027)
High nat. attn.			0.054*** (0.020)	0.063** (0.027)
Two days X Medium nat. attn.			-0.025 (0.031)	-0.053 (0.040)
Three days X Medium nat. attn.			-0.030 (0.034)	-0.044 (0.043)
Four days X Medium nat. attn.			-0.054 (0.035)	-0.079* (0.045)
Two days X High nat. attn.			-0.030 (0.029)	-0.054 (0.038)
Three days X High nat. attn.			-0.075** (0.031)	-0.072* (0.041)
Four days X High nat. attn.			-0.106*** (0.033)	-0.104** (0.044)
Controls (incl. interactions)?	No	Yes	No	Yes
Observations	18,610	12,800	18,540	12,770
R ²	0.010	0.016	0.007	0.013

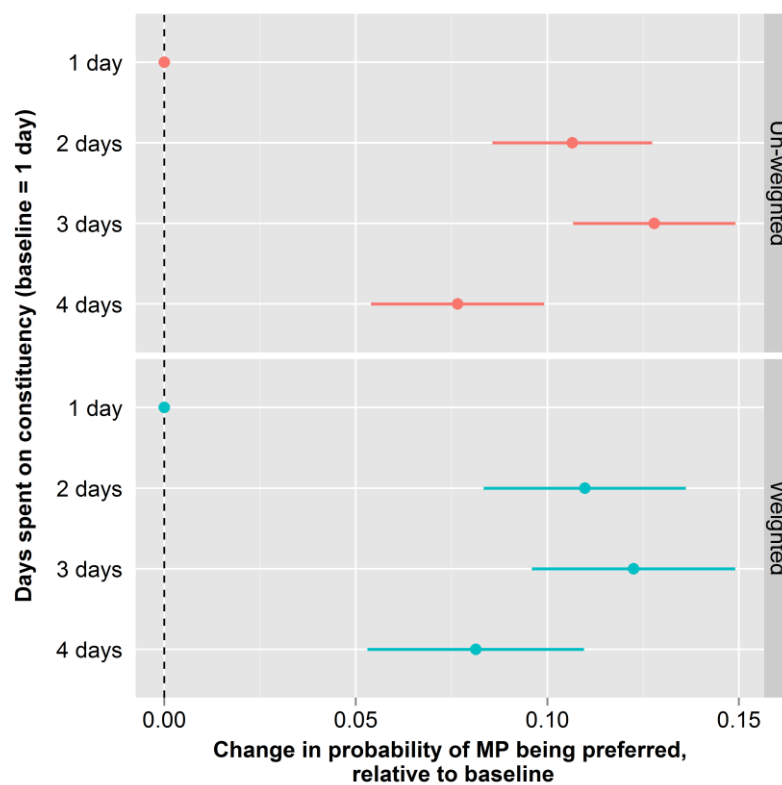
Note:

* p<0.1; ** p<0.05; *** p<0.01

Appendix 8: AMCE estimates for weighted and un-weighted survey samples

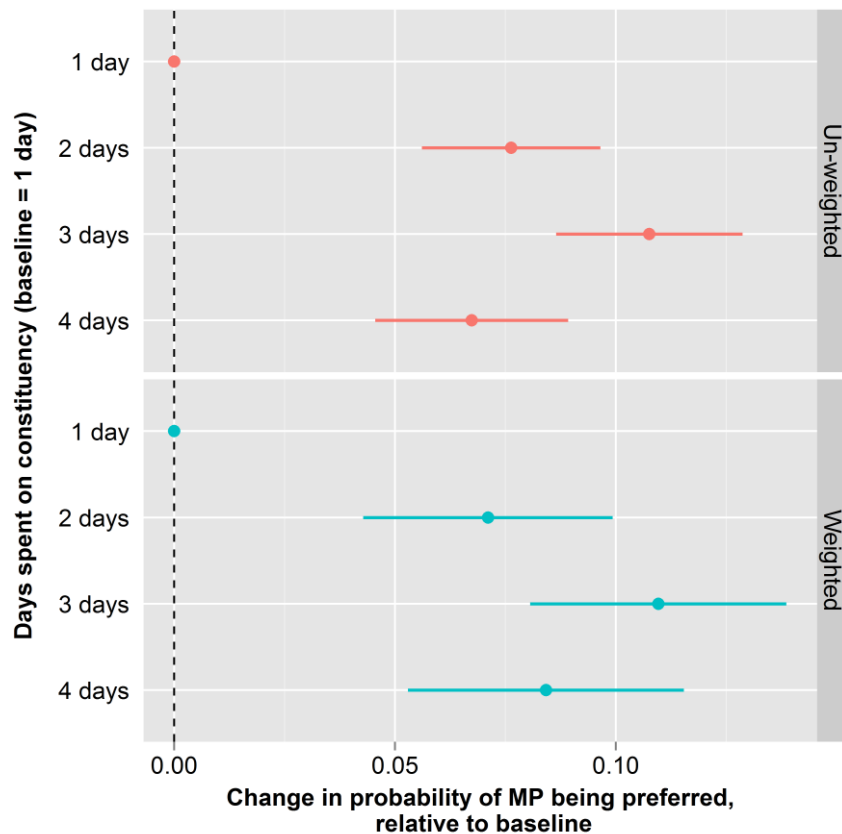
In the main body of the paper, we note that our AMCE estimates are substantively unchanged when we use survey weights. The Figures below show, for Studies 1 and 2, the AMCE estimates for MP days spent on constituency service when survey data are not weighted (as in the main text) and when the survey data are weighted according to YouGov's standard survey weights. In both figures, the relative magnitude of the effects are virtually the same for weighted and not weighted samples.

Figure S17: AMCE estimates of MP constituency focus, weighted versus un-weighted survey data (Study 1)



Note: The top panel shows AMCE estimates based on the un-weighted survey sample. The bottom panel shows AMCE estimates based on the weighted survey sample.

Figure S18: AMCE estimates of MP constituency focus, weighted versus un-weighted survey data (Study 2)



Note: The top panel shows AMCE estimates based on the un-weighted survey sample. The bottom panel shows AMCE estimates based on the weighted survey sample.

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